



ANALYSIS REPORT

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CRG-The Chemours Co. FC, LLC
AECOM
Sabre Building
4051 Ogletown Road, Suite 300
Newark DE 19713

Report Date: December 18, 2017 11:00

Project: CWK - DE RIVER NAPL DELINEATION PHASE III

Account #: 07032
Group Number: 1872396
PO Number: LBIO-67047
State of Sample Origin: NJ

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Respectfully Submitted,



Nancy Jean Bornholm
Principal Specialist

(717) 556-7250



SAMPLE INFORMATION

<u>Client Sample Description</u>	<u>Sample Collection Date/Time</u>	<u>ELLE#</u>
D16-BOR-10-(0-0.5) Soil	11/07/2017 13:45	9304777
D16-BOR-10-(0.5-1.0) Soil	11/07/2017 13:50	9304778
D16-BOR-10-(0.5-1.0) MS Soil	11/07/2017 13:50	9304779
D16-BOR-10-(0.5-1.0) MSD Soil	11/07/2017 13:50	9304780
D16-BOR-10-(0.5-1.0) Dupl Soil	11/07/2017 13:50	9304781
D16-BOR-10-(5.0-5.5) Soil	11/07/2017 14:25	9304782
D16-BOR-10-(6.0-6.5) Soil	11/07/2017 14:30	9304783
D16-BOR-10-(7.0-7.3) Soil	11/07/2017 14:50	9304784
D16-BOR-10-(11.0-11.3) Soil	11/07/2017 14:55	9304785
D16-BOR-11-(0-0.5) Soil	11/07/2017 12:15	9304786
D16-BOR-11-(0.5-1.0) Soil	11/07/2017 12:20	9304787
D16-BOR-11-(5.5-6.0) Soil	11/07/2017 12:45	9304788
D16-BOR-11-(7.0-7.5) Soil	11/07/2017 12:50	9304789
D16-BOR-11-(10.0-10.3) Soil	11/07/2017 13:10	9304790
D16-BOR-11-(10.3-10.5) Soil	11/07/2017 13:15	9304791
D16-BOR-11-(7.0-7.5)-D Soil	11/07/2017 12:50	9304792
CWKDERIVER3-TBLK-6 Blank Water	11/07/2017 09:30	9304793
CWKDERIVER-EQBLK-6 Blank Water	11/07/2017 09:30	9304794

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.



DATA OF KNOWN QUALITY CONFORMANCE/NON-CONFORMANCE SUMMARY QUESTIONNAIRE

Laboratory Name: Eurofins Lancaster Laboratories Environmental

Client: CRG-The Chemours Co. FC, LLC

Project: CWK - DE RIVER NAPL DELINEATION PHASE III

Sampling Date(s): 11/07/17

Laboratory Sample ID(s): 9304777-9304794

List DKQP Methods Used (e.g., 8260, 8270, et cetera)

ASTM D422; SM 2540 G-1997 %Moisture Calc; SW-846 6010B; SW-846 6020; SW-846 7470A; SW-846 7471A; SW-846 8260B; SW-846 8260FRN Modified; SW-846 8270C; SW-846 9060A; SW-846 9060A modified

		Yes or No
1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the NJDEP Data of Known Quality performance standards?	Yes
1A	Were the method specified handling, preservation, and holding time requirements met?	Yes
1B	EPH Method: Was the EPH method conducted without significant modifications (see Section 11.3 of respective DKQ methods)?	NA
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	Yes
3	Were samples received at an appropriate temperature (</=6° C)?	Yes
4	Were all QA/QC performance criteria specified in the NJDEP DKQP standards achieved?	No
5A	Were reporting limits* specified or referenced on the chain-of-custody or communicated to the laboratory prior to sample receipt?	Yes
5B	Were these reporting limits met?	No
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the DKQP documents and/or site-specific QAPP?	No
7	Are project-specific matrix spikes and/or laboratory duplicates included in this data set?	Yes

Notes: For all questions to which the response was "No" (with the exception of question #7), additional information should be provided in an attached narrative. If the answer to question #1, #1A, or #1B is "No", the data package does not meet the requirements for "Data of Known Quality."

*The Limit of Quantitation (LOQ) meets requirements for the Reporting Limit (RL) as defined in the NJDEP Data of Known Quality performance standards, unless otherwise noted.


Kathryn A. Brungard
Senior Specialist

12/18/2017



Lancaster Laboratories
Environmental

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Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III
ELLE Group #: 1872396

General Comments:

See the Laboratory Sample Analysis Record section of the Analysis Report for the method references.

All QC met criteria unless otherwise noted in an Analysis Specific Comment below.

Refer to the QC Summary for specific values and acceptance criteria.

Project specific QC samples are included in this data set.

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Surrogate recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in an Analysis Specific Comment below.

For dual column analyses, the surrogate (for multi-surrogate tests, at least one surrogate) must be within the acceptance limits on at least one of the two columns.

The samples were received at the appropriate temperature and in accordance with the chain of custody unless otherwise noted.

Analysis Specific Comments:**SW-846 8260B, GC/MS Volatiles**

Sample #s: 9304777, 9304782, 9304783, 9304784, 9304785, 9304788, 9304789, 9304790, 9304791, 9304792

The NJ DKQP analyte list requirement was not met for Method 8260B. The client specified list is reported.

Sample #s: 9304793, 9304794

The NJ DKQP analyte list requirement was not met for Method 8260B. The client specified list is reported.

The NJ DKQP required reporting limit could not be attained for 1,2-Dibromoethane.

Sample #s: 9304786

The NJ DKQP analyte list requirement was not met for Method 8260B. The client specified list is reported.

The recovery for the sample internal standard is outside the QC acceptance limits. The following corrective action was taken:
The sample was re-analyzed and the QC is again outside of the acceptance limits, indicating a matrix effect. The data is reported from the initial trial.

Sample #s: 9304778, 9304779, 9304780, 9304787

The NJ DKQP required reporting limit could not be attained for 1,2-dibromoethane.

The NJ DKQP analyte list requirement was not met for Method 8260B. The client specified list is reported.

Project defined QC acceptance limits are not met. All QC is

compliant with the laboratory statistically generated limits.

Batch #: R173182AA (Sample number(s): 9304778-9304780, 9304787 UNSPK: 9304778)

The recovery(ies) for the following analyte(s) in the LCS and/or LCSD were below the acceptance window:
Dichlorodifluoromethane, Chlorotrifluoroethene

The recovery(ies) for the following analyte(s) in the MS and/or MSD were below the acceptance window:
n-Hexane, Dichlorodifluoromethane, Chloromethane, Vinyl Chloride, Trichlorofluoromethane,
Chlorobenzene, 1,4-Dichlorobenzene, Freon 113, 1,3-Dichlorobenzene, 1,2-Dichlorobenzene

The relative percent difference(s) for the following analyte(s) in the MS/MSD were outside acceptance
windows: Chlorobenzene, 1,4-Dichlorobenzene

The recovery(ies) for one or more surrogates were below the acceptance window for sample(s) 9304778,
9304779, 9304780, 9304787, MS, MSD

Batch #: X173182AA (Sample number(s): 9304782-9304786, 9304788-9304792)

The recovery(ies) for the following analyte(s) in the LCS and/or LCSD exceeded the acceptance window
indicating a positive bias: Propionitrile

SW-846 8260FRN Modified, GC/MS Volatiles

Sample #s: 9304777, 9304778, 9304782, 9304783, 9304784, 9304786, 9304787, 9304788, 9304789,
9304790, 9304791, 9304792, 9304793, 9304794

Z= The response for a target analyte(s) in the continuing
calibration verification standard is outside the QC acceptance
limits. Since the response is high indicating increased
sensitivity, and the target analyte(s) is not detected in the
sample, the data is reported.

Batch #: J173191AA (Sample number(s): 9304777, 9304782-9304784 UNSPK: P302536)

The recovery(ies) for the following analyte(s) in the LCS and/or LCSD exceeded the acceptance window
indicating a positive bias: Fluoromethane

Batch #: J173201AA (Sample number(s): 9304793-9304794)

The recovery(ies) for the following analyte(s) in the LCS and/or LCSD exceeded the acceptance window
indicating a positive bias: 1,1,2-Trifluoroethane, Chlorodifluoromethane, Chlorodifluoroethane,
1,2-Dichlorotrifluoroethane, 1,2-Dichloro-1-fluoroethane

Batch #: J173211AA (Sample number(s): 9304778-9304780, 9304786-9304792 UNSPK: 9304778)

The recovery(ies) for the following analyte(s) in the LCS and/or LCSD exceeded the acceptance window
indicating a positive bias: Fluoromethane, Chloropentafluoroethane

The recovery(ies) for the following analyte(s) in the MS and/or MSD exceeded the acceptance window
indicating a positive bias: Chlorodifluoromethane, 1,1-Dichloro-1-fluoroethane

SW-846 8270C, GC/MS Semivolatiles

Sample #: 9304780

Project defined QC acceptance limits are not met. All QC is
compliant with the laboratory statistically generated limits.

Reporting limits were raised due to interference from the sample matrix.

Sample #: 9304779

Project defined QC acceptance limits are not met. All QC is

compliant with the laboratory statistically generated limits.

Reporting limits were raised due to interference from the sample matrix.

Sample #s: 9304777

Project defined QC acceptance limits are not met. All QC is compliant with the laboratory statistically generated limits.

The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. Since the recovery is high and the target analyte(s) was not detected in the sample, the data is reported.

Sample #s: 9304782, 9304783, 9304784, 9304785, 9304787, 9304788, 9304789, 9304790, 9304791, 9304792

Project defined QC acceptance limits are not met. All QC is compliant with the laboratory statistically generated limits.

The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. Since the recovery is high and the target analyte(s) was not detected in the sample, the data is reported.

Z=The response for a target analyte(s) in the initial calibration verification standard is outside the QC acceptance limits. Since the response is high indicating increased sensitivity, and the target analyte(s) is not detected in the sample, the data is reported.

Sample #s: 9304778, 9304786

Project defined QC acceptance limits are not met. All QC is compliant with the laboratory statistically generated limits.

The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. Since the recovery is high and the target analyte(s) was not detected in the sample, the data is reported.

Z=The response for a target analyte(s) in the initial calibration verification standard is outside the QC acceptance limits. Since the response is high indicating increased sensitivity, and the target analyte(s) is not detected in the sample, the data is reported.

Reporting limits were raised due to interference from the sample matrix.

Sample #s: 9304794

Project defined QC acceptance limits are not met. All QC is compliant with the laboratory statistically generated limits.

The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. Since the recovery is high and the target analyte(s) was not detected in the sample, the data is reported.

Z=The response for a target analyte(s) in the initial calibration verification standard is outside the QC acceptance limits. Since the response is high indicating increased sensitivity, and the target analyte(s) is not detected in the sample, the data is

reported.

Reporting limits were raised due to limited sample volume.

Batch #: 17313WAN026 (Sample number(s): 9304794)

The recovery(ies) for the following analyte(s) in the LCS and/or LCSD exceeded the acceptance window indicating a positive bias: 4-Aminobiphenyl

The recovery(ies) for the following analyte(s) in the LCS and/or LCSD were below the acceptance window: 1-Naphthylamine, 2-Naphthylamine, o-Toluidine, 4-Chloroaniline, Hexachlorocyclopentadiene, Dimethylphthalate

Batch #: 17314SLH026 (Sample number(s): 9304777 UNSPK: P302536)

The recovery(ies) for the following analyte(s) in the LCS exceeded the acceptance window indicating a positive bias: 4-Aminobiphenyl

The recovery(ies) for the following analyte(s) in the LCS were below the acceptance window: 1-Naphthylamine, 2-Naphthylamine, 4-Chloroaniline

The recovery(ies) for the following analyte(s) in the MS and/or MSD exceeded the acceptance window indicating a positive bias: 4-Aminobiphenyl

The recovery(ies) for the following analyte(s) in the MS and/or MSD were below the acceptance window: 1-Naphthylamine, 2-Naphthylamine, o-Toluidine, 4-Chloroaniline, 3,3'-Dichlorobenzidine

The relative percent difference(s) for the following analyte(s) in the MS/MSD were outside acceptance windows: o-Toluidine, 4-Chloroaniline

Batch #: 17317SLE026 (Sample number(s): 9304778-9304780, 9304782-9304792 UNSPK: 9304778)

The recovery(ies) for the following analyte(s) in the LCS exceeded the acceptance window indicating a positive bias: 4-Aminobiphenyl

The recovery(ies) for the following analyte(s) in the LCS were below the acceptance window: 1-Naphthylamine, 2-Naphthylamine, o-Toluidine, 4-Chloroaniline

The recovery(ies) for the following analyte(s) in the MS and/or MSD were below the acceptance window: 1,2,4-Trichlorobenzene, Acenaphthene, 2,4-Dinitrotoluene, Pyrene, 2-Nitrophenol, 2,4-Dimethylphenol, 2,4-Dichlorophenol, 2,4-Dinitrophenol, 4,6-Dinitro-2-methylphenol, Hexachloroethane, Nitrobenzene, Isophorone, bis(2-Chloroethoxy)methane, Naphthalene, Hexachlorobutadiene, Hexachlorocyclopentadiene, Acenaphthylene, Dimethylphthalate, 2,6-Dinitrotoluene, Fluorene, 4-Chlorophenyl-phenylether, Diethylphthalate, N-Nitrosodiphenylamine, Hexachlorobenzene, Phenanthrene, Anthracene, Fluoranthene, Benzidine, Benzo(a)anthracene, Chrysene, 3,3'-Dichlorobenzidine, bis(2-Ethylhexyl)phthalate, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene, Dibenz(a,h)anthracene, Benzo(g,h,i)perylene, Acetophenone, 4-Aminobiphenyl, Aniline, 1-Naphthylamine, 2-Naphthylamine, 2,3,4,6-Tetrachlorophenol, o-Toluidine, 4-Chloroaniline, 2-Methylnaphthalene, 2,4,5-Trichlorophenol, 3-Nitroaniline, 4-Nitroaniline, Carbazole, Diphenyl ether, 1,1'-Biphenyl, 2-Chlorophenol, N-Nitroso-di-n-propylamine, 4-Chloro-3-methylphenol, 2,4,6-Trichlorophenol, bis(2-Chloroethyl)ether, 2-Chloronaphthalene, 1,2-Diphenylhydrazine, 4-Bromophenyl-phenylether, Di-n-butylphthalate, Di-n-octylphthalate, 2-Methylphenol, 2,2'-oxybis(1-Chloropropane), Dibenzofuran

The relative percent difference(s) for the following analyte(s) in the MS/MSD were outside acceptance windows: 1,2,4-Trichlorobenzene, 2,4-Dinitrotoluene, 2-Nitrophenol, Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene, Dibenz(a,h)anthracene, Benzo(g,h,i)perylene

SW-846 6010B, Metals

Sample #s: 9304794

The NJ DKQP analyte list requirement was not met for Metals. The client

specified list is reported.

Batch #: 173120570502 (Sample number(s): 9304794 UNSPK: P297281 BKG: P297281)

The recovery(ies) for the following analyte(s) in the MS and/or MSD exceeded the acceptance window indicating a positive bias: Sodium, Aluminum

The recovery(ies) for the following analyte(s) in the MS and/or MSD were below the acceptance window: Aluminum, Iron, Magnesium

The relative percent difference(s) for the following analyte(s) in the MS/MSD were outside acceptance windows: Aluminum, Iron

Batch #: 173120570804 (Sample number(s): 9304777-9304781, 9304786-9304787, 9304792 UNSPK: 9304778 BKG: 9304778)

The recovery(ies) for the following analyte(s) in the MS and/or MSD exceeded the acceptance window indicating a positive bias: Aluminum, Calcium, Iron, Magnesium, Potassium, Zinc

The recovery(ies) for the following analyte(s) in the MS and/or MSD were below the acceptance window: Zinc

The relative percent difference(s) for the following analyte(s) in the MS/MSD were outside acceptance windows: Zinc

SW-846 6020, Metals

Sample #s: 9304794

The NJ DKQP analyte list requirement was not met for metals. The client specified list is reported.

Batch #: 173120570804A (Sample number(s): 9304777-9304781, 9304786-9304787, 9304792 UNSPK: 9304778 BKG: 9304778)

The recovery(ies) for the following analyte(s) in the MS and/or MSD exceeded the acceptance window indicating a positive bias: Lead, Vanadium

The recovery(ies) for the following analyte(s) in the MS and/or MSD were below the acceptance window: Arsenic, Manganese, Cadmium

Batch #: 173120570804D (Sample number(s): 9304777-9304781, 9304786-9304787, 9304792 UNSPK: 9304778 BKG: 9304778)

The recovery(ies) for the following analyte(s) in the MS and/or MSD were below the acceptance window: Barium

Batch #: 173120605006A (Sample number(s): 9304794 UNSPK: P304760 BKG: P304760)

The duplicate RPD for the following analyte(s) exceeded the acceptance window: Manganese

SW-846 9060A, Wet Chemistry

Sample #s: 9304794

The reported result is the average of the following trials:

0 mg/l
0.008 mg/l
0.009 mg/l
0 mg/l

SW-846 9060A modified, Wet Chemistry

Sample #s: 9304782, 9304783, 9304788

Due to the nature of this sample matrix, the sample cup was filled to capacity with less than 1000 mg of sample being used. The lowered sample weight has resulted in a raised reporting limit.

Batch #: 17321667631A (Sample number(s): 9304777, 9304782-9304788 UNSPK: P302536 BKG: P302536)

The duplicate RPD for the following analyte(s) exceeded the acceptance window: TOC Solids/Sludges Combustion

Batch #: 17325667631A (Sample number(s): 9304789, 9304792 UNSPK: 9304789 BKG: 9304789)

The recovery(ies) for the following analyte(s) in the MS exceeded the acceptance window indicating a positive bias: TOC Solids/Sludges Combustion

Batch #: 17325667631B (Sample number(s): 9304790 UNSPK: 9304790 BKG: 9304790)

The recovery(ies) for the following analyte(s) in the MS exceeded the acceptance window indicating a positive bias: TOC Solids/Sludges Combustion

SM 2540 G-1997 %Moisture Calc, Wet Chemistry

Batch #: 17313820011A (Sample number(s): 9304777-9304792 BKG: 9304778)

The duplicate RPD for the following analyte(s) exceeded the acceptance window: Moisture, Moisture, Moisture Duplicate

Sample Description: D16-BOR-10-(0-0.5) Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304777
ELLE Group #: 1872396
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 13:45

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	GC/MS Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	
10237	Acetone	67-64-1	120	14	41	1.13
10237	Benzene	71-43-2	1 U	1	10	1.13
10237	Bromodichloromethane	75-27-4	2 U	2	10	1.13
10237	2-Butanone	78-93-3	11 J	8	20	1.13
10237	n-Butylbenzene	104-51-8	2 U	2	10	1.13
10237	sec-Butylbenzene	135-98-8	2 U	2	10	1.13
10237	tert-Butylbenzene	98-06-6	2 U	2	10	1.13
10237	Carbon Disulfide	75-15-0	5 J	2	10	1.13
10237	Carbon Tetrachloride	56-23-5	2 U	2	10	1.13
10237	Chlorobenzene	108-90-7	43	2	10	1.13
10237	Chloroethane	75-00-3	4 U	4	10	1.13
10237	Chloroform	67-66-3	2 U	2	10	1.13
10237	Chloromethane	74-87-3	4 U	4	10	1.13
10237	2-Chlorotoluene	95-49-8	2 U	2	10	1.13
10237	4-Chlorotoluene	106-43-4	2 U	2	10	1.13
10237	Chlorotrifluoroethene	79-38-9	4 U	4	10	1.13
10237	Dibromochloromethane	124-48-1	2 U	2	10	1.13
10237	1,2-Dibromoethane	106-93-4	2 U	2	10	1.13
10237	1,2-Dichlorobenzene	95-50-1	4 J	2	10	1.13
10237	1,3-Dichlorobenzene	541-73-1	2 U	2	10	1.13
10237	1,4-Dichlorobenzene	106-46-7	2 U	2	10	1.13
10237	Dichlorodifluoromethane	75-71-8	4 U	4	10	1.13
10237	1,1-Dichloroethane	75-34-3	2 U	2	10	1.13
10237	1,2-Dichloroethane	107-06-2	2 U	2	10	1.13
10237	1,1-Dichloroethene	75-35-4	2 U	2	10	1.13
10237	cis-1,2-Dichloroethene	156-59-2	2 U	2	10	1.13
10237	trans-1,2-Dichloroethene	156-60-5	2 U	2	10	1.13
10237	1,2-Dichloroethene (Total)	540-59-0	2 U	2	10	1.13
10237	Dichlorofluoromethane	75-43-4	4 U	4	10	1.13
10237	1,2-Dichloropropane	78-87-5	2 U	2	10	1.13
10237	1,1-Dichloropropene	563-58-6	2 U	2	10	1.13
10237	cis-1,3-Dichloropropene	10061-01-5	2 U	2	10	1.13
10237	Ethylbenzene	100-41-4	2 U	2	10	1.13
10237	Freon 113	76-13-1	4 U	4	20	1.13
10237	Freon 133a	75-88-7	4 U	4	10	1.13
10237	n-Hexane	110-54-3	2 U	2	10	1.13
10237	2-Hexanone	591-78-6	6 U	6	20	1.13
10237	Isobutyl Alcohol	78-83-1	200 U	200	510	1.13
10237	Isopropylbenzene	98-82-8	3 J	2	10	1.13
10237	p-Isopropyltoluene	99-87-6	2 U	2	10	1.13
10237	Methacrylonitrile	126-98-7	10 U	10	100	1.13
10237	Methyl Methacrylate	80-62-6	2 U	2	10	1.13

*=This limit was used in the evaluation of the final result

Sample Description: D16-BOR-10-(0-0.5) Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304777
ELLE Group #: 1872396
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 13:45

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Volatiles SW-846 8260B						
10237	Methyl Tertiary Butyl Ether	1634-04-4	1 U	1	10	1.13
10237	4-Methyl-2-pentanone	108-10-1	6 U	6	20	1.13
10237	Methylene Chloride	75-09-2	4 U	4	10	1.13
10237	Propionitrile	107-12-0	61 U	61	200	1.13
10237	n-Propylbenzene	103-65-1	2 U	2	10	1.13
10237	Styrene	100-42-5	2 U	2	10	1.13
10237	1,1,1,2-Tetrachloroethane	630-20-6	2 U	2	10	1.13
10237	1,1,2,2-Tetrachloroethane	79-34-5	2 U	2	10	1.13
10237	Tetrachloroethene	127-18-4	2 U	2	10	1.13
10237	Tetrahydrofuran	109-99-9	8 U	8	16	1.13
10237	Toluene	108-88-3	3 J	2	10	1.13
10237	1,1,1-Trichloroethane	71-55-6	2 U	2	10	1.13
10237	1,1,2-Trichloroethane	79-00-5	2 U	2	10	1.13
10237	Trichloroethene	79-01-6	2 U	2	10	1.13
10237	Trichlorofluoromethane	75-69-4	4 U	4	10	1.13
10237	1,2,4-Trimethylbenzene	95-63-6	2 U	2	10	1.13
10237	1,3,5-Trimethylbenzene	108-67-8	2 U	2	10	1.13
10237	Vinyl Chloride	75-01-4	2 U	2	10	1.13
10237	m+p-Xylene	179601-23-1	2 U	2	10	1.13
10237	o-Xylene	95-47-6	2 U	2	10	1.13
10237	Xylene (Total)	1330-20-7	2 U	2	10	1.13

The NJ DKQP analyte list requirement was not met for Method 8260B. The client specified list is reported.

GC/MS Volatiles SW-846 8260FRN Modified			ug/kg	ug/kg	ug/kg
13101	Chlorodifluoroethane	75-68-3	2 U	2	9
13101	Chlorodifluoromethane	75-45-6	4 U	4	9
13101	Chlorofluoromethane	593-70-4	2 U	2	9
13101	Chloropentafluoroethane	76-15-3	26 U	26	88
13101	1,1-Dichloro-1-fluoroethane	1717-00-6	2 U	2	9
13101	1,2-Dichloro-1-fluoroethane	430-57-9	2 U	2	9
13101	Dichlorotetrafluoroethane	76-14-2	4 U	4	9
13101	1,2-Dichlorotrifluoroethane	354-23-4	2 U	2	9
13101	Dichlorotrifluoroethane	306-83-2	2 U	2	9
13101	Fluoromethane	593-53-3	5 UZ	5	18
13101	Freon 113a	354-58-5	9 U	9	35
13101	1,1,2-Trifluoroethane	430-66-0	4 U	4	9
13101	Vinyl fluoride	75-02-5	11 UZ	11	35

Z= The response for a target analyte(s) in the continuing calibration verification standard is outside the QC acceptance limits. Since the response is high indicating increased sensitivity, and the target analyte(s) is not detected in the sample, the data is reported.

*=This limit was used in the evaluation of the final result

Sample Description: D16-BOR-10-(0-0.5) Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304777
ELLE Group #: 1872396
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 13:45

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
00884 Volatile Library Search - 15						
The results from the volatile library search are listed on the attached FORM 1 - VOA-TIC. The qualifiers appearing in the "Q" column are defined at the end of the report.						
GC/MS Semivolatiles	SW-846 8270C		ug/kg	ug/kg	ug/kg	
10723	Acenaphthene	83-32-9	18 J	6	30	1
10723	Acenaphthylene	208-96-8	14 J	6	30	1
10723	Acetophenone	98-86-2	30 U	30	59	1
10723	4-Aminobiphenyl	92-67-1	300 U	300	890	1
10723	Aniline	62-53-3	300 U	300	890	1
10723	Anthracene	120-12-7	43	6	30	1
10723	Benzidine	92-87-5	450 U	450	890	1
10723	Benzo(a)anthracene	56-55-3	50	6	30	1
10723	Benzo(a)pyrene	50-32-8	44	6	30	1
10723	Benzo(b)fluoranthene	205-99-2	65	6	30	1
10723	Benzo(g,h,i)perylene	191-24-2	35	6	30	1
10723	Benzo(k)fluoranthene	207-08-9	30 J	6	30	1
10723	1,1'-Biphenyl	92-52-4	46 J	30	59	1
10723	4-Bromophenyl-phenylether	101-55-3	30 U	30	59	1
10723	Butylbenzylphthalate	85-68-7	120 U	120	300	1
10723	Di-n-butylphthalate	84-74-2	120 U	120	300	1
10723	Carbazole	86-74-8	30 U	30	59	1
10723	4-Chloro-3-methylphenol	59-50-7	30 U	30	59	1
10723	4-Chloroaniline	106-47-8	720	59	120	1
10723	bis(2-Chloroethoxy)methane	111-91-1	30 U	30	59	1
10723	bis(2-Chloroethyl)ether	111-44-4	30 U	30	59	1
10723	2-Chloronaphthalene	91-58-7	12 U	12	59	1
10723	2-Chlorophenol	95-57-8	30 U	30	59	1
10723	4-Chlorophenyl-phenylether	7005-72-3	30 U	30	59	1
10723	2,2'-Oxybis(1-Chloropropane)	108-60-1	30 U	30	59	1
Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10723	Chrysene	218-01-9	69	6	30	1
10723	Dibenz(a,h)anthracene	53-70-3	9 J	6	30	1
10723	Dibenzofuran	132-64-9	30 U	30	59	1
10723	3,3'-Dichlorobenzidine	91-94-1	180 U	180	590	1
10723	2,4-Dichlorophenol	120-83-2	30 U	30	59	1
10723	Diethylphthalate	84-66-2	120 U	120	300	1
10723	2,4-Dimethylphenol	105-67-9	30 U	30	59	1
10723	Dimethylphthalate	131-11-3	120 U	120	300	1
10723	4,6-Dinitro-2-methylphenol	534-52-1	300 U	300	890	1
10723	2,4-Dinitrophenol	51-28-5	530 U	530	1,800	1

*=This limit was used in the evaluation of the final result

Sample Description: D16-BOR-10-(0-0.5) Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304777
ELLE Group #: 1872396
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 13:45

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	GC/MS Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
10723	2,4-Dinitrotoluene	121-14-2	120 U	120	300	1
10723	2,6-Dinitrotoluene	606-20-2	30 U	30	59	1
10723	1,4-Dioxane	123-91-1	180 U	180	590	1
10723	Diphenyl ether	101-84-8	36 J	30	59	1
10723	1,2-Diphenylhydrazine	122-66-7	30 U	30	59	1
10723	bis(2-Ethylhexyl)phthalate	117-81-7	120 U	120	300	1
10723	Fluoranthene	206-44-0	130	6	30	1
10723	Fluorene	86-73-7	37	6	30	1
10723	Hexachlorobenzene	118-74-1	6 U	6	30	1
10723	Hexachlorobutadiene	87-68-3	30 U	30	59	1
10723	Hexachlorocyclopentadiene	77-47-4	300 U	300	890	1
10723	Hexachloroethane	67-72-1	59 U	59	300	1
10723	Indeno(1,2,3-cd)pyrene	193-39-5	26 J	6	30	1
10723	Isophorone	78-59-1	30 U	30	59	1
10723	2-Methylnaphthalene	91-57-6	190	6	30	1
10723	2-Methylphenol	95-48-7	30 U	30	59	1
10723	4-Methylphenol	106-44-5	110	30	59	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
10723	Naphthalene	91-20-3	140	6	30	1
10723	1-Naphthylamine	134-32-7	300 U	300	890	1
10723	2-Naphthylamine	91-59-8	300 U	300	890	1
10723	2-Nitroaniline	88-74-4	30 U	30	59	1
10723	3-Nitroaniline	99-09-2	120 U	120	300	1
10723	4-Nitroaniline	100-01-6	120 U	120	300	1
10723	Nitrobenzene	98-95-3	30 U	30	59	1
10723	2-Nitrophenol	88-75-5	30 U	30	59	1
10723	4-Nitrophenol	100-02-7	300 U	300	890	1
10723	N-Nitrosodimethylamine	62-75-9	120 U	120	300	1
10723	N-Nitroso-di-n-propylamine	621-64-7	30 U	30	59	1
10723	N-Nitrosodiphenylamine	86-30-6	30 U	30	59	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
10723	Di-n-octylphthalate	117-84-0	120 U	120	300	1
10723	Parathion	56-38-2	300 U	300	890	1
10723	Pentachlorobenzene	608-93-5	30 U	30	59	1
10723	Pentachlorophenol	87-86-5	59 U	59	300	1
10723	Phenanthrene	85-01-8	120	6	30	1
10723	Phenol	108-95-2	120	30	59	1
10723	Pyrene	129-00-0	140	6	30	1
10723	2,3,4,6-Tetrachlorophenol	58-90-2	120 U	120	300	1

*=This limit was used in the evaluation of the final result

Sample Description: D16-BOR-10-(0-0.5) Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304777
ELLE Group #: 1872396
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 13:45

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	GC/MS Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
10723	o-Tolidine	95-53-4	360 U	360	1,200	1
10723	1,2,4-Trichlorobenzene	120-82-1	170	30	59	1
10723	2,4,5-Trichlorophenol	95-95-4	30 U	30	59	1
10723	2,4,6-Trichlorophenol	88-06-2	30 U	30	59	1

The project QA/QC requirements were not met.
Project defined QC acceptance limits are not met. All QC is compliant with the laboratory statistically generated limits.

The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. Since the recovery is high and the target analyte(s) was not detected in the sample, the data is reported.

00886 SVOA Library Search - 25

The results from the semivolatile library search are listed on the attached FORM 1 - SV-TIC. The qualifiers appearing in the "Q" column are defined at the end of the report.

Metals	SW-846 6010B	mg/kg	mg/kg	mg/kg		
01643	Aluminum	7429-90-5	19,100	13.0	29.1	1
01650	Calcium	7440-70-2	3,960	4.84	29.1	1
01654	Iron	7439-89-6	27,700	11.7	29.1	1
01657	Magnesium	7439-95-4	5,180	3.53	14.5	1
01662	Potassium	7440-09-7	3,170	24.3	72.7	1
01667	Sodium	7440-23-5	825	24.3	145	1
06972	Zinc	7440-66-6	193	0.349	2.91	1

	SW-846 6020	mg/kg	mg/kg	mg/kg		
06124	Antimony	7440-36-0	0.511	0.136	0.291	2
06125	Arsenic	7440-38-2	12.3	0.186	0.582	2
06126	Barium	7440-39-3	112	0.264	0.582	2
06127	Beryllium	7440-41-7	0.945	0.0152	0.145	2
06128	Cadmium	7440-43-9	0.681	0.0500	0.145	2
06131	Chromium	7440-47-3	49.0	0.253	0.582	2
06132	Cobalt	7440-48-4	13.7	0.0454	0.145	2
06133	Copper	7440-50-8	40.2	0.156	0.582	2
06135	Lead	7439-92-1	50.4	0.0323	0.291	2
06137	Manganese	7439-96-5	949	0.263	0.582	2
06139	Nickel	7440-02-0	30.6	0.290	0.582	2
06141	Selenium	7782-49-2	0.823	0.145	0.582	2
06142	Silver	7440-22-4	1.44	0.0425	0.145	2
06145	Thallium	7440-28-0	0.205	0.0364	0.145	2
06148	Vanadium	7440-62-2	48.8	0.0620	0.145	2

	SW-846 7471A	mg/kg	mg/kg	mg/kg
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*=This limit was used in the evaluation of the final result

Sample Description: D16-BOR-10-(0-0.5) Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304777
ELLE Group #: 1872396

Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15

Collection Date/Time: 11/07/2017 13:45

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals 00159	Mercury	SW-846 7471A 7439-97-6	mg/kg 0.263	mg/kg 0.0176	mg/kg 0.176	1
Wet Chemistry 02079	Total Organic Carbon (TOC)	SW-846 9060A modified n.a.	mg/kg 31,000	mg/kg 1,820	mg/kg 5,470	1
Wet Chemistry 07103	ASTM D422		% Passing 100	% Passing 0.50	% Passing 0.50	1
07103	75 mm	n.a.	100	0.50	0.50	1
07103	37.5 mm	n.a.	100	0.50	0.50	1
07103	19 mm	n.a.	100	0.50	0.50	1
07103	4.75 mm	n.a.	100	0.50	0.50	1
07103	3.35 mm	n.a.	100	0.50	0.50	1
07103	2.36 mm	n.a.	99.2	0.50	0.50	1
07103	1.18 mm	n.a.	98.4	0.50	0.50	1
07103	0.6 mm	n.a.	97.6	0.50	0.50	1
07103	0.3 mm	n.a.	96.1	0.50	0.50	1
07103	0.15 mm	n.a.	89.0	0.50	0.50	1
07103	0.075 mm	n.a.	84.7	0.50	0.50	1
07103	0.064 mm	n.a.	81.0	0.50	0.50	1
07103	0.05 mm	n.a.	72.0	0.50	0.50	1
07103	0.02 mm	n.a.	49.0	0.50	0.50	1
07103	0.005 mm	n.a.	22.0	0.50	0.50	1
07103	0.002 mm	n.a.	11.5	0.50	0.50	1
07103	0.001 mm	n.a.	4.0	0.50	0.50	1
Wet Chemistry 00111	SM 2540 G-1997 %Moisture Calc		%	%	%	
00111	Moisture	n.a.	44.1	0.50	0.50	1
Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

Sample Comments

State of New Jersey Lab Certification No. PA011

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	TCL Volatiles + Add'l Cmpnds	SW-846 8260B	1	A173212AA	11/17/2017 16:44	Linda C Pape	1.13
13101	Freons	SW-846 8260FRN Modified	1	J173191AA	11/15/2017 18:35	Kevin A Sposito	0.98

*=This limit was used in the evaluation of the final result

Sample Description: D16-BOR-10-(0-0.5) Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304777
ELLE Group #: 1872396
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 13:45

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08389	GC/MS - LL Encore Prep	SW-846 5035A	1	201731247803	11/08/2017 14:30	Rebecca Williams	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	2	201731247803	11/08/2017 14:30	Rebecca Williams	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	3	201731247803	11/08/2017 14:31	Rebecca Williams	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	4	201731247803	11/08/2017 14:32	Rebecca Williams	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035A	1	201731247803	11/08/2017 14:28	Rebecca Williams	n.a.
10723	TCL SVOAs + Add'l Cmpds	SW-846 8270C	1	17314SLH026	11/17/2017 07:28	Anthony P Bauer	1
10813	BNA Soil Microwave APP IX	SW-846 3546	1	17314SLH026	11/12/2017 12:30	Elizabeth E Donovan	1
01643	Aluminum	SW-846 6010B	1	173120570804	11/13/2017 04:29	Jonathan J Allen	1
01650	Calcium	SW-846 6010B	1	173120570804	11/13/2017 04:29	Jonathan J Allen	1
01654	Iron	SW-846 6010B	1	173120570804	11/13/2017 04:29	Jonathan J Allen	1
01657	Magnesium	SW-846 6010B	1	173120570804	11/13/2017 04:29	Jonathan J Allen	1
01662	Potassium	SW-846 6010B	1	173120570804	11/13/2017 04:29	Jonathan J Allen	1
01667	Sodium	SW-846 6010B	1	173120570804	11/13/2017 04:29	Jonathan J Allen	1
06972	Zinc	SW-846 6010B	1	173120570804	11/13/2017 04:29	Jonathan J Allen	1
06124	Antimony	SW-846 6020	1	173120570804A	11/17/2017 13:24	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	173120570804A	11/17/2017 13:24	Choon Y Tian	2
06126	Barium	SW-846 6020	1	173120570804D	11/17/2017 13:24	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	173120570804A	11/17/2017 13:24	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	173120570804A	11/21/2017 18:38	Bradley M Berlot	2
06131	Chromium	SW-846 6020	1	173120570804A	11/17/2017 13:24	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	173120570804A	11/17/2017 13:24	Choon Y Tian	2
06133	Copper	SW-846 6020	1	173120570804A	11/17/2017 13:24	Choon Y Tian	2
06135	Lead	SW-846 6020	1	173120570804A	11/17/2017 13:24	Choon Y Tian	2
06137	Manganese	SW-846 6020	1	173120570804A	11/17/2017 13:24	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	173120570804A	11/17/2017 13:24	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	173120570804B	11/17/2017 13:24	Choon Y Tian	2
06142	Silver	SW-846 6020	1	173120570804A	11/17/2017 13:24	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	173120570804A	11/17/2017 13:24	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	173120570804A	11/17/2017 13:24	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	173120571101	11/09/2017 10:09	Damary Valentin	1
05708	ICP-ICPMS - SW, 3050B - U3	SW-846 3050B	1	173120570804	11/09/2017 17:05	Barbara A Kane	1
05711	Hg-SW, 7471A - U3	SW-846 7471A	1	173120571101	11/09/2017 07:36	James L Mertz	1
02079	Total Organic Carbon (TOC)	SW-846 9060A modified	1	17321667631A	11/17/2017 18:58	Drew M Gerhart	1
07103	Grain Size to 1 um	ASTM D422	1	17336710304A	12/02/2017 13:00	Joshua P Trost	1
00111	Moisture	SM 2540 G-1997 %Moisture Calc	1	17313820011A	11/10/2017 09:29	Larry E Bevins	1

*=This limit was used in the evaluation of the final result

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1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

! _____ !
! DRN-1 !

Lab Name: Lancaster Laboratories Contract: _____
Lab Code: LANCAS Case No.: SAS No.: SDG No.:
Matrix: (soil/water) SOIL Lab Sample ID: 9304777
Sample wt/vol: 4.41 (g/mL) g Lab File ID: HP09685.i/17nov17a.b/an17s37.d
Level: (low/med) LOW Date Received: 11/07/17
% Moisture: not dec. 44.1 Date Analyzed: 11/17/17
Column: (pack/cap) CAP Dilution Factor: 1.0
Number TICs found: 0 CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. VOCTIC	Total VOC TICs		0	U
2.				
3.				
4.				
5.				
6.				
7.				
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27.				
28.				
29.				
30.				

page 1 of 1

FORM I VOA-TIC

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

! _____ !
! DRN-1 !

Lab Name: Lancaster Laboratories Contract: _____
Lab Code: LANCAS Case No.: _____ SAS No.: _____ SDG No.: _____
Matrix: (soil/water) SOIL Lab Sample ID: 9304777
Sample wt/vol: 30.1 (g/mL) g Lab File ID: ok0878.d
Level: (low/med) LOW Date Received: 11/07/17
% Moisture: 44.1 Decanted: (Y/N) Date Extracted: 11/12/17
Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/17/17
Injection Volume: 1 (uL) Dilution Factor: 1
GPC Cleanup: N pH: Extraction: Mic

CONCENTRATION UNITS:

Number TICs found: 24

(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.590-90-9	!CH3C(O)CH2CH2OH	! 3.213	! 970	! J
2.	!Unknown Aldol Condensate	! 4.090	! 2500	! JB
3.95-51-2	!o-Chloroaniline	! 6.837	! 620	! J
4.	!Unknown	! 8.907	! 550	! J
5.	!Unknown	! 9.260	! 360	! J
6.13798-23-7	!Hexathiane	! 9.284	! 800	! J
7.	!Unknown	! 10.272	! 1900	! J
8.	!Unknown	! 10.601	! 1000	! J
9.15972-60-8	!Alachlor	! 10.819	! 750	! J
10.57-10-3	!n-Hexadecanoic acid	! 11.030	! 450	! JB
11.	!Unknown	! 11.201	! 250	! J
12.1478-61-1	!4,4'-(Hexafluoroisopropylidene)	! 11.330	! 460	! J
13.	!Unknown	! 11.395	! 280	! J
14.	!Unknown	! 11.448	! 530	! J
15.	!Unknown	! 11.489	! 620	! J
16.	!Unknown	! 11.560	! 1900	! J
17.10544-50-0	!Cyclic octaatomic sulfur	! 11.695	! 4600	! J
18.80-05-7	!Phenol, 4,4'-(1-methylethylidene)	! 11.925	! 4300	! J
19.1000309-70-6	!Oxalic acid, cyclobutyl hexa-	! 12.977	! 250	! J
20.1000309-12-4	!Sulfurous acid, 2-propyl tri-	! 13.642	! 740	! J
21.	!Unknown	! 14.318	! 490	! J
22.	!Unknown	! 14.724	! 430	! J
23.	!Unknown	! 14.977	! 520	! J
24.	!Unknown	! 15.989	! 640	! J
25.	!	!	!	!
26.SVOCTIC	Total SVOC TICs		26000	JB
27.	!	!	!	!
28.	!	!	!	!
29.	!	!	!	!
30.	!	!	!	!

page 1 of 1

FORM I SV-1

Sample Description: D16-BOR-10-(0.5-1.0) Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304778
ELLE Group #: 1872396
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15

Collection Date/Time: 11/07/2017 13:50

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	GC/MS Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	
10237	Acetone	67-64-1	920 U	920	2,600	59.95
10237	Benzene	71-43-2	66 U	66	660	59.95
10237	Bromodichloromethane	75-27-4	130 U	130	660	59.95
10237	2-Butanone	78-93-3	530 U	530	1,300	59.95
10237	n-Butylbenzene	104-51-8	130 U	130	660	59.95
10237	sec-Butylbenzene	135-98-8	130 U	130	660	59.95
10237	tert-Butylbenzene	98-06-6	130 U	130	660	59.95
10237	Carbon Disulfide	75-15-0	130 U	130	660	59.95
10237	Carbon Tetrachloride	56-23-5	130 U	130	660	59.95
10237	Chlorobenzene	108-90-7	14,000	130	660	59.95
10237	Chloroethane	75-00-3	260 U	260	660	59.95
10237	Chloroform	67-66-3	130 U	130	660	59.95
10237	Chloromethane	74-87-3	260 U	260	660	59.95
10237	2-Chlorotoluene	95-49-8	130 U	130	660	59.95
10237	4-Chlorotoluene	106-43-4	130 U	130	660	59.95
10237	Chlorotrifluoroethene	79-38-9	260 U	260	660	59.95
10237	Dibromochloromethane	124-48-1	130 U	130	660	59.95
10237	1,2-Dibromoethane	106-93-4	130 U	130	660	59.95
10237	1,2-Dichlorobenzene	95-50-1	1,200	130	660	59.95
10237	1,3-Dichlorobenzene	541-73-1	1,300	130	660	59.95
10237	1,4-Dichlorobenzene	106-46-7	6,500	130	660	59.95
10237	Dichlorodifluoromethane	75-71-8	260 U	260	660	59.95
10237	1,1-Dichloroethane	75-34-3	130 U	130	660	59.95
10237	1,2-Dichloroethane	107-06-2	130 U	130	660	59.95
10237	1,1-Dichloroethene	75-35-4	130 U	130	660	59.95
10237	cis-1,2-Dichloroethene	156-59-2	130 U	130	660	59.95
10237	trans-1,2-Dichloroethene	156-60-5	130 U	130	660	59.95
10237	1,2-Dichloroethene (Total)	540-59-0	130 U	130	660	59.95
10237	Dichlorofluoromethane	75-43-4	260 U	260	660	59.95
10237	1,2-Dichloropropane	78-87-5	130 U	130	660	59.95
10237	1,1-Dichloropropene	563-58-6	130 U	130	660	59.95
10237	cis-1,3-Dichloropropene	10061-01-5	130 U	130	660	59.95
10237	Ethylbenzene	100-41-4	130 U	130	660	59.95
10237	Freon 113	76-13-1	260 U	260	1,300	59.95
10237	Freon 133a	75-88-7	260 U	260	660	59.95
10237	n-Hexane	110-54-3	130 U	130	660	59.95
10237	2-Hexanone	591-78-6	400 U	400	1,300	59.95
10237	Isobutyl Alcohol	78-83-1	13,000 U	13,000	33,000	59.95
10237	Isopropylbenzene	98-82-8	760	130	660	59.95
10237	p-Isopropyltoluene	99-87-6	130 U	130	660	59.95
10237	Methacrylonitrile	126-98-7	660 U	660	6,600	59.95
10237	Methyl Methacrylate	80-62-6	130 U	130	660	59.95

*=This limit was used in the evaluation of the final result

Sample Description: D16-BOR-10-(0.5-1.0) Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304778
ELLE Group #: 1872396
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 13:50

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	GC/MS Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	
10237	Methyl Tertiary Butyl Ether	1634-04-4	66 U	66	660	59.95
10237	4-Methyl-2-pentanone	108-10-1	400 U	400	1,300	59.95
10237	Methylene Chloride	75-09-2	260 U	260	660	59.95
10237	Propionitrile	107-12-0	4,000 U	4,000	13,000	59.95
10237	n-Propylbenzene	103-65-1	130 U	130	660	59.95
10237	Styrene	100-42-5	130 U	130	660	59.95
10237	1,1,1,2-Tetrachloroethane	630-20-6	130 U	130	660	59.95
10237	1,1,2,2-Tetrachloroethane	79-34-5	130 U	130	660	59.95
10237	Tetrachloroethene	127-18-4	130 U	130	660	59.95
10237	Tetrahydrofuran	109-99-9	530 U	530	1,100	59.95
10237	Toluene	108-88-3	130 U	130	660	59.95
10237	1,1,1-Trichloroethane	71-55-6	130 U	130	660	59.95
10237	1,1,2-Trichloroethane	79-00-5	130 U	130	660	59.95
10237	Trichloroethene	79-01-6	130 U	130	660	59.95
10237	Trichlorofluoromethane	75-69-4	260 U	260	660	59.95
10237	1,2,4-Trimethylbenzene	95-63-6	130 U	130	660	59.95
10237	1,3,5-Trimethylbenzene	108-67-8	130 U	130	660	59.95
10237	Vinyl Chloride	75-01-4	130 U	130	660	59.95
10237	m+p-Xylene	179601-23-1	260 J	130	660	59.95
10237	o-Xylene	95-47-6	210 J	130	660	59.95
10237	Xylene (Total)	1330-20-7	470 J	130	660	59.95

The NJ DKQP required reporting limit could not be attained for 1,2-dibromoethane.

The NJ DKQP analyte list requirement was not met for Method 8260B. The client specified list is reported.

Project defined QC acceptance limits are not met. All QC is compliant with the laboratory statistically generated limits.

GC/MS Volatiles	SW-846 8260FRN Modified	ug/kg	ug/kg	ug/kg		
13101	Chlorodifluoroethane	75-68-3	3 U	3	13	1.19
13101	Chlorodifluoromethane	75-45-6	5 U	5	13	1.19
13101	Chlorofluoromethane	593-70-4	3 U	3	13	1.19
13101	Chloropentafluoroethane	76-15-3	39 UZ	39	130	1.19
13101	1,1-Dichloro-1-fluoroethane	1717-00-6	3 U	3	13	1.19
13101	1,2-Dichloro-1-fluoroethane	430-57-9	3 U	3	13	1.19
13101	Dichlorotetrafluoroethane	76-14-2	5 U	5	13	1.19
13101	1,2-Dichlorotrifluoroethane	354-23-4	3 U	3	13	1.19
13101	Dichlorotrifluoroethane	306-83-2	3 U	3	13	1.19
13101	Fluoromethane	593-53-3	8 UZ	8	26	1.19
13101	Freon 113a	354-58-5	13 U	13	52	1.19
13101	1,1,2-Trifluoroethane	430-66-0	5 U	5	13	1.19

*=This limit was used in the evaluation of the final result

Sample Description: D16-BOR-10-(0.5-1.0) Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304778
ELLE Group #: 1872396
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 13:50

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	GC/MS Volatiles	SW-846 8260FRN Modified	ug/kg	ug/kg	ug/kg	
13101	Vinyl fluoride	75-02-5	16 U	16	52	1.19
Z= The response for a target analyte(s) in the continuing calibration verification standard is outside the QC acceptance limits. Since the response is high indicating increased sensitivity, and the target analyte(s) is not detected in the sample, the data is reported.						
	GC/MS Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
10723	Acenaphthene	83-32-9	200	36	180	5
10723	Acenaphthylene	208-96-8	85 J	36	180	5
10723	Acetophenone	98-86-2	180 U	180	360	5
10723	4-Aminobiphenyl	92-67-1	1,800 UZ	1,800	5,400	5
10723	Aniline	62-53-3	1,800 U	1,800	5,400	5
10723	Anthracene	120-12-7	150 J	36	180	5
10723	Benzidine	92-87-5	2,700 U	2,700	5,400	5
10723	Benzo(a)anthracene	56-55-3	150 J	36	180	5
10723	Benzo(a)pyrene	50-32-8	120 J	36	180	5
10723	Benzo(b)fluoranthene	205-99-2	160 J	36	180	5
10723	Benzo(g,h,i)perylene	191-24-2	71 J	36	180	5
10723	Benzo(k)fluoranthene	207-08-9	86 J	36	180	5
10723	1,1'-Biphenyl	92-52-4	690	180	360	5
10723	4-Bromophenyl-phenylether	101-55-3	180 U	180	360	5
10723	Butylbenzylphthalate	85-68-7	730 U	730	1,800	5
10723	Di-n-butylphthalate	84-74-2	730 U	730	1,800	5
10723	Carbazole	86-74-8	180 U	180	360	5
10723	4-Chloro-3-methylphenol	59-50-7	180 U	180	360	5
10723	4-Chloroaniline	106-47-8	4,000	360	730	5
10723	bis(2-Chloroethoxy)methane	111-91-1	180 U	180	360	5
10723	bis(2-Chloroethyl)ether	111-44-4	180 U	180	360	5
10723	2-Chloronaphthalene	91-58-7	73 U	73	360	5
10723	2-Chlorophenol	95-57-8	180 U	180	360	5
10723	4-Chlorophenyl-phenylether	7005-72-3	180 U	180	360	5
10723	2,2'-oxybis(1-Chloropropane)	108-60-1	180 U	180	360	5
Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10723	Chrysene	218-01-9	220	36	180	5
10723	Dibenz(a,h)anthracene	53-70-3	36 U	36	180	5

*=This limit was used in the evaluation of the final result

Sample Description: D16-BOR-10-(0.5-1.0) Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304778
ELLE Group #: 1872396
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 13:50

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	GC/MS Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
10723	Dibenzofuran	132-64-9	180 U	180	360	5
10723	3,3'-Dichlorobenzidine	91-94-1	1,100 U	1,100	3,600	5
10723	2,4-Dichlorophenol	120-83-2	180 U	180	360	5
10723	Diethylphthalate	84-66-2	730 U	730	1,800	5
10723	2,4-Dimethylphenol	105-67-9	180 U	180	360	5
10723	Dimethylphthalate	131-11-3	730 U	730	1,800	5
10723	4,6-Dinitro-2-methylphenol	534-52-1	1,800 U	1,800	5,400	5
10723	2,4-Dinitrophenol	51-28-5	3,300 U	3,300	11,000	5
10723	2,4-Dinitrotoluene	121-14-2	730 U	730	1,800	5
10723	2,6-Dinitrotoluene	606-20-2	180 U	180	360	5
10723	1,4-Dioxane	123-91-1	1,100 U	1,100	3,600	5
10723	Diphenyl ether	101-84-8	630	180	360	5
10723	1,2-Diphenylhydrazine	122-66-7	180 U	180	360	5
10723	bis(2-Ethylhexyl)phthalate	117-81-7	1,200 J	730	1,800	5
10723	Fluoranthene	206-44-0	330	36	180	5
10723	Fluorene	86-73-7	200	36	180	5
10723	Hexachlorobenzene	118-74-1	36 U	36	180	5
10723	Hexachlorobutadiene	87-68-3	180 U	180	360	5
10723	Hexachlorocyclopentadiene	77-47-4	1,800 U	1,800	5,400	5
10723	Hexachloroethane	67-72-1	360 U	360	1,800	5
10723	Indeno(1,2,3-cd)pyrene	193-39-5	57 J	36	180	5
10723	Isophorone	78-59-1	180 U	180	360	5
10723	2-Methylnaphthalene	91-57-6	600	36	180	5
10723	2-Methylphenol	95-48-7	180 U	180	360	5
10723	4-Methylphenol	106-44-5	220 J	180	360	5
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
10723	Naphthalene	91-20-3	1,100	36	180	5
10723	1-Naphthylamine	134-32-7	1,800 U	1,800	5,400	5
10723	2-Naphthylamine	91-59-8	1,800 U	1,800	5,400	5
10723	2-Nitroaniline	88-74-4	180 U	180	360	5
10723	3-Nitroaniline	99-09-2	730 U	730	1,800	5
10723	4-Nitroaniline	100-01-6	730 U	730	1,800	5
10723	Nitrobenzene	98-95-3	180 U	180	360	5
10723	2-Nitrophenol	88-75-5	180 U	180	360	5
10723	4-Nitrophenol	100-02-7	1,800 U	1,800	5,400	5
10723	N-Nitrosodimethylamine	62-75-9	730 U	730	1,800	5
10723	N-Nitroso-di-n-propylamine	621-64-7	180 U	180	360	5
10723	N-Nitrosodiphenylamine	86-30-6	180 U	180	360	5
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					

*=This limit was used in the evaluation of the final result

Sample Description: D16-BOR-10-(0.5-1.0) Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304778
ELLE Group #: 1872396
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 13:50

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	GC/MS Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
10723	Di-n-octylphthalate	117-84-0	730 U	730	1,800	5
10723	Parathion	56-38-2	1,800 U	1,800	5,400	5
10723	Pentachlorobenzene	608-93-5	180 U	180	360	5
10723	Pentachlorophenol	87-86-5	360 U	360	1,800	5
10723	Phenanthrene	85-01-8	460	36	180	5
10723	Phenol	108-95-2	200 J	180	360	5
10723	Pyrene	129-00-0	370	36	180	5
10723	2,3,4,6-Tetrachlorophenol	58-90-2	730 U	730	1,800	5
10723	o-Toluidine	95-53-4	2,200 U	2,200	7,300	5
10723	1,2,4-Trichlorobenzene	120-82-1	1,400	180	360	5
10723	2,4,5-Trichlorophenol	95-95-4	180 U	180	360	5
10723	2,4,6-Trichlorophenol	88-06-2	180 U	180	360	5

The project QA/QC requirements were not met.

Project defined QC acceptance limits are not met. All QC is compliant with the laboratory statistically generated limits.

The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. Since the recovery is high and the target analyte(s) was not detected in the sample, the data is reported.

Z=The response for a target analyte(s) in the initial calibration verification standard is outside the QC acceptance limits. Since the response is high indicating increased sensitivity, and the target analyte(s) is not detected in the sample, the data is reported.

Reporting limits were raised due to interference from the sample matrix.

00886 SVOA Library Search - 25

The results from the semivolatile library search are listed on the attached FORM 1 - SV-TIC. The qualifiers appearing in the "Q" column are defined at the end of the report.

Metals	SW-846 6010B	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	25,000	16.7	37.3
01650	Calcium	7440-70-2	4,290	6.22	37.3
01654	Iron	7439-89-6	35,900	15.0	37.3
01657	Magnesium	7439-95-4	6,290	4.54	18.7
01662	Potassium	7440-09-7	3,860	31.2	93.3
01667	Sodium	7440-23-5	944	31.2	187
06972	Zinc	7440-66-6	339	0.448	3.73
	SW-846 6020	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	1.07	0.174	0.373

*=This limit was used in the evaluation of the final result

Sample Description: D16-BOR-10-(0.5-1.0) Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304778
ELLE Group #: 1872396
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 13:50

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	SW-846 6020		mg/kg	mg/kg	mg/kg	
06125	Arsenic	7440-38-2	19.0	0.239	0.747	2
06126	Barium	7440-39-3	142	0.339	0.747	2
06127	Beryllium	7440-41-7	1.26	0.0196	0.187	2
06128	Cadmium	7440-43-9	2.02	0.0642	0.187	2
06131	Chromium	7440-47-3	75.8	0.325	0.747	2
06132	Cobalt	7440-48-4	17.6	0.0582	0.187	2
06133	Copper	7440-50-8	72.6	0.200	0.747	2
06135	Lead	7439-92-1	106	0.0414	0.373	2
06137	Manganese	7439-96-5	1,040	0.337	0.747	2
06139	Nickel	7440-02-0	42.5	0.372	0.747	2
06141	Selenium	7782-49-2	1.01	0.187	0.747	2
06142	Silver	7440-22-4	1.16	0.0545	0.187	2
06145	Thallium	7440-28-0	0.276	0.0467	0.187	2
06148	Vanadium	7440-62-2	66.0	0.0795	0.187	2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.400	0.0213	0.213	1
Wet Chemistry	SW-846 9060A modified		mg/kg	mg/kg	mg/kg	
02079	Total Organic Carbon (TOC)	n.a.	45,900	2,540	7,630	1
Wet Chemistry	ASTM D422		% Passing	% Passing	% Passing	
07103	75 mm	n.a.	100	0.50	0.50	1
07103	37.5 mm	n.a.	100	0.50	0.50	1
07103	19 mm	n.a.	100	0.50	0.50	1
07103	4.75 mm	n.a.	99.9	0.50	0.50	1
07103	3.35 mm	n.a.	99.9	0.50	0.50	1
07103	2.36 mm	n.a.	99.8	0.50	0.50	1
07103	1.18 mm	n.a.	99.6	0.50	0.50	1
07103	0.6 mm	n.a.	98.1	0.50	0.50	1
07103	0.3 mm	n.a.	93.0	0.50	0.50	1
07103	0.15 mm	n.a.	81.0	0.50	0.50	1
07103	0.075 mm	n.a.	76.4	0.50	0.50	1
07103	0.064 mm	n.a.	74.0	0.50	0.50	1
07103	0.05 mm	n.a.	69.0	0.50	0.50	1
07103	0.02 mm	n.a.	50.0	0.50	0.50	1
07103	0.005 mm	n.a.	20.5	0.50	0.50	1
07103	0.002 mm	n.a.	9.5	0.50	0.50	1
07103	0.001 mm	n.a.	2.0	0.50	0.50	1
Wet Chemistry	SM 2540 G-1997		%	%	%	
	%Moisture Calc					
00111	Moisture	n.a.	54.6	0.50	0.50	1

*=This limit was used in the evaluation of the final result



Sample Description: D16-BOR-10-(0.5-1.0) Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304778
ELLE Group #: 1872396
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 13:50

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	SM 2540 G-1997 %Moisture Calc		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

Sample Comments

State of New Jersey Lab Certification No. PA011

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	TCL Volatiles + Add'l Cmpds	SW-846 8260B	1	R173182AA	11/14/2017 14:30	Jennifer K Howe	59.95
13101	Freons	SW-846 8260FRN	1	J173211AA	11/17/2017 17:03	Kevin A Sposito	1.19
Modified							
08389	GC/MS - LL Encore Prep	SW-846 5035A	1	201731247803	11/08/2017 14:36	Rebecca Williams	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	2	201731247803	11/08/2017 14:36	Rebecca Williams	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	3	201731247803	11/08/2017 14:37	Rebecca Williams	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	4	201731247803	11/08/2017 14:38	Rebecca Williams	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035A	1	201731247803	11/08/2017 14:35	Rebecca Williams	n.a.
10723	TCL SVOAs + Add'l Cmpds	SW-846 8270C	1	17317SLE026	11/16/2017 04:46	Anthony P Bauer	5
10813	BNA Soil Microwave APP IX	SW-846 3546	1	17317SLE026	11/14/2017 02:50	Samantha M Metzgar	1
01643	Aluminum	SW-846 6010B	1	173120570804	11/13/2017 03:24	Jonathan J Allen	1
01650	Calcium	SW-846 6010B	1	173120570804	11/13/2017 03:24	Jonathan J Allen	1
01654	Iron	SW-846 6010B	1	173120570804	11/13/2017 03:24	Jonathan J Allen	1
01657	Magnesium	SW-846 6010B	1	173120570804	11/13/2017 03:24	Jonathan J Allen	1
01662	Potassium	SW-846 6010B	1	173120570804	11/13/2017 03:24	Jonathan J Allen	1
01667	Sodium	SW-846 6010B	1	173120570804	11/13/2017 03:24	Jonathan J Allen	1
06972	Zinc	SW-846 6010B	1	173120570804	11/13/2017 03:24	Jonathan J Allen	1
06124	Antimony	SW-846 6020	1	173120570804A	11/21/2017 18:27	Bradley M Berlot	2
06125	Arsenic	SW-846 6020	1	173120570804A	11/17/2017 12:37	Choon Y Tian	2
06126	Barium	SW-846 6020	1	173120570804D	11/17/2017 12:37	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	173120570804A	11/17/2017 12:37	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	173120570804A	11/21/2017 18:27	Bradley M Berlot	2
06131	Chromium	SW-846 6020	1	173120570804A	11/17/2017 12:37	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	173120570804A	11/17/2017 12:37	Choon Y Tian	2
06133	Copper	SW-846 6020	1	173120570804A	11/17/2017 12:37	Choon Y Tian	2
06135	Lead	SW-846 6020	1	173120570804A	11/17/2017 12:37	Choon Y Tian	2
06137	Manganese	SW-846 6020	1	173120570804A	11/17/2017 12:37	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	173120570804A	11/17/2017 12:37	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	173120570804B	11/17/2017 12:37	Choon Y Tian	2
06142	Silver	SW-846 6020	1	173120570804A	11/17/2017 12:37	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	173120570804A	11/17/2017 12:37	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	173120570804A	11/17/2017 12:37	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	173120571101	11/09/2017 09:43	Damary Valentin	1

*=This limit was used in the evaluation of the final result

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Sample Description: D16-BOR-10-(0.5-1.0) Soil
DE RIVER NAPL DELINEATION PHASE III**CRG-The Chemours Co. FC, LLC**
ELLE Sample #: SW 9304778
ELLE Group #: 1872396
Matrix: Soil**Project Name:** CWK - DE RIVER NAPL DELINEATION PHASE IIISubmittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 13:50**Laboratory Sample Analysis Record**

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05708	ICP-ICPMS - SW, 3050B - U3	SW-846 3050B	1	173120570804	11/09/2017 17:05	Barbara A Kane	1
05711	Hg-SW, 7471A - U3	SW-846 7471A	1	173120571101	11/09/2017 07:36	James L Mertz	1
02079	Total Organic Carbon (TOC)	SW-846 9060A modified	1	17321667631B	11/17/2017 21:07	Drew M Gerhart	1
07103	Grain Size to 1 um	ASTM D422	1	17336710304A	12/02/2017 13:00	Joshua P Trost	1
00111	Moisture	SM 2540 G-1997 %Moisture Calc	1	17313820011A	11/10/2017 09:29	Larry E Bevins	1

*=This limit was used in the evaluation of the final result

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1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

! _____ !
! DRN-2 !

Lab Name: Lancaster Laboratories Contract: _____
Lab Code: LANCAS Case No.: _____ SAS No.: _____ SDG No.: _____
Matrix: (soil/water) SOIL Lab Sample ID: 9304778
Sample wt/vol: 4.17 (g/mL) g Lab File ID: HP07566.i/17nov14a.b/rn14s36.d
Level: (low/med) MED Date Received: 11/07/17
% Moisture: not dec. 54.6 Date Analyzed: 11/14/17
Column: (pack/cap) CAP Dilution Factor: 60.0
Number TICs found: 0 CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. VOCTIC	Total VOC TICs		0	U
2.				
3.				
4.				
5.				
6.				
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FORM I VOA-TIC

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

! _____ !

! DRN-2 !

Lab Name: Lancaster Laboratories Contract: _____
Lab Code: LANCAS Case No.: _____ SAS No.: _____ SDG No.: _____
Matrix: (soil/water) SOIL Lab Sample ID: 9304778
Sample wt/vol: 30.38(g/mL) g Lab File ID: pk0572.d
Level: (low/med) LOW Date Received: 11/07/17
% Moisture: 54.6 Decanted: (Y/N) Date Extracted: 11/14/17
Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/16/17
Injection Volume: 1 (uL) Dilution Factor: 5
GPC Cleanup: N pH: Extraction: Mic

CONCENTRATION UNITS:

Number TICs found: 14

(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.590-90-9	!CH3C(O)CH2CH2OH	! 3.084	! 11000	! J
2.	!Unknown Aldol Condensate	! 3.996	! 6100	! JB
3.	!Unknown	! 5.825	! 1800	! J
4.95-51-2	!o-Chloroaniline	! 6.766	! 2900	! J
5.	!Unknown	! 8.825	! 2300	! J
6.13798-23-7	!Hexathiane	! 9.142	! 7300	! J
7.	!Unknown	! 10.183	! 6000	! J
8.	!Unknown	! 10.501	! 2000	! J
9.2528-36-1	!Phosphoric acid, dibutyl phe!	! 10.636	! 1900	! J
10.10544-50-0	!Cyclic octaatomic sulfur	! 11.577	! 10000	! J
11.80-05-7	!Phenol, 4,4'-(1-methylethyli	! 11.830	! 5700	! J
12.630-02-4	!Octacosane	! 14.195	! 1500	! J
13.	!Unknown	! 14.483	! 1700	! J
14.	!Unknown	! 14.860	! 1700	! J
15.				
16.SVOCTIC	!Total SVOC TICs		62000	JB
17.				
18.				
19.				
20.				
21.				
22.				
23.				
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25.				
26.				
27.				
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page 1 of 1

FORM I SV-1

Sample Description: D16-BOR-10-(0.5-1.0) MS Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304779
ELLE Group #: 1872396
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 13:50

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	GC/MS Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	
10237	Acetone	67-64-1	22,000	960	2,800	62.5
10237	Benzene	71-43-2	2,800	69	690	62.5
10237	Bromodichloromethane	75-27-4	2,700	140	690	62.5
10237	2-Butanone	78-93-3	17,000	550	1,400	62.5
10237	n-Butylbenzene	104-51-8	2,300	140	690	62.5
10237	sec-Butylbenzene	135-98-8	2,400	140	690	62.5
10237	tert-Butylbenzene	98-06-6	2,300	140	690	62.5
10237	Carbon Disulfide	75-15-0	2,000	140	690	62.5
10237	Carbon Tetrachloride	56-23-5	2,600	140	690	62.5
10237	Chlorobenzene	108-90-7	7,600	140	690	62.5
10237	Chloroethane	75-00-3	2,000	280	690	62.5
10237	Chloroform	67-66-3	2,800	140	690	62.5
10237	Chloromethane	74-87-3	1,600	280	690	62.5
10237	2-Chlorotoluene	95-49-8	2,500	140	690	62.5
10237	4-Chlorotoluene	106-43-4	2,500	140	690	62.5
10237	Dibromochloromethane	124-48-1	2,400	140	690	62.5
10237	1,2-Dibromoethane	106-93-4	2,500	140	690	62.5
10237	1,2-Dichlorobenzene	95-50-1	2,700	140	690	62.5
10237	1,3-Dichlorobenzene	541-73-1	2,700	140	690	62.5
10237	1,4-Dichlorobenzene	106-46-7	3,700	140	690	62.5
10237	Dichlorodifluoromethane	75-71-8	700	280	690	62.5
10237	1,1-Dichloroethane	75-34-3	2,700	140	690	62.5
10237	1,2-Dichloroethane	107-06-2	2,800	140	690	62.5
10237	1,1-Dichloroethene	75-35-4	2,300	140	690	62.5
10237	cis-1,2-Dichloroethene	156-59-2	2,900	140	690	62.5
10237	trans-1,2-Dichloroethene	156-60-5	2,600	140	690	62.5
10237	1,2-Dichloroethene (Total)	540-59-0	5,500	140	690	62.5
10237	Dichlorofluoromethane	75-43-4	2,600	280	690	62.5
10237	1,2-Dichloropropane	78-87-5	2,900	140	690	62.5
10237	1,1-Dichloropropene	563-58-6	2,500	140	690	62.5
10237	cis-1,3-Dichloropropene	10061-01-5	2,900	140	690	62.5
10237	Ethylbenzene	100-41-4	2,400	140	690	62.5
10237	Freon 113	76-13-1	1,600	280	1,400	62.5
10237	n-Hexane	110-54-3	1,200	140	690	62.5
10237	2-Hexanone	591-78-6	12,000	410	1,400	62.5
10237	Isobutyl Alcohol	78-83-1	57,000	14,000	34,000	62.5
10237	Isopropylbenzene	98-82-8	2,700	140	690	62.5
10237	p-Isopropyltoluene	99-87-6	2,400	140	690	62.5
10237	Methacrylonitrile	126-98-7	23,000	690	6,900	62.5
10237	Methyl Methacrylate	80-62-6	2,800	140	690	62.5
10237	Methyl Tertiary Butyl Ether	1634-04-4	2,900	69	690	62.5
10237	4-Methyl-2-pentanone	108-10-1	15,000	410	1,400	62.5

*=This limit was used in the evaluation of the final result

Sample Description: D16-BOR-10-(0.5-1.0) MS Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304779
ELLE Group #: 1872396
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 13:50

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	GC/MS Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	
10237	Methylene Chloride	75-09-2	2,900	280	690	62.5
10237	Propionitrile	107-12-0	22,000	4,100	14,000	62.5
10237	n-Propylbenzene	103-65-1	2,300	140	690	62.5
10237	Styrene	100-42-5	2,300	140	690	62.5
10237	1,1,1,2-Tetrachloroethane	630-20-6	2,500	140	690	62.5
10237	1,1,2,2-Tetrachloroethane	79-34-5	2,500	140	690	62.5
10237	Tetrachloroethene	127-18-4	2,400	140	690	62.5
10237	Tetrahydrofuran	109-99-9	12,000	550	1,100	62.5
10237	Toluene	108-88-3	2,600	140	690	62.5
10237	1,1,1-Trichloroethane	71-55-6	2,700	140	690	62.5
10237	1,1,2-Trichloroethane	79-00-5	2,600	140	690	62.5
10237	Trichloroethene	79-01-6	2,800	140	690	62.5
10237	Trichlorofluoromethane	75-69-4	1,700	280	690	62.5
10237	1,2,4-Trimethylbenzene	95-63-6	2,400	140	690	62.5
10237	1,3,5-Trimethylbenzene	108-67-8	2,400	140	690	62.5
10237	Vinyl Chloride	75-01-4	1,500	140	690	62.5
10237	m+p-Xylene	179601-23-1	5,000	140	690	62.5
10237	o-Xylene	95-47-6	2,500	140	690	62.5
10237	Xylene (Total)	1330-20-7	7,500	140	690	62.5

The NJ DKQP required reporting limit could not be attained for 1,2-dibromoethane.

The NJ DKQP analyte list requirement was not met for Method 8260B. The client specified list is reported.

Project defined QC acceptance limits are not met. All QC is compliant with the laboratory statistically generated limits.

GC/MS Volatiles		SW-846 8260FRN Modified	ug/kg	ug/kg	ug/kg	
13101	Chlorodifluoroethane	75-68-3	58	3	13	1.16
13101	Chlorodifluoromethane	75-45-6	70	5	13	1.16
13101	Chlorofluoromethane	593-70-4	51	3	13	1.16
13101	1,1-Dichloro-1-fluoroethane	1717-00-6	68	3	13	1.16
13101	1,2-Dichloro-1-fluoroethane	430-57-9	50	3	13	1.16
13101	Dichlorotetrafluoroethane	76-14-2	58	5	13	1.16
13101	1,2-Dichlorotrifluoroethane	354-23-4	58	3	13	1.16
13101	Dichlorotrifluoroethane	306-83-2	55	3	13	1.16
13101	Freon 113a	354-58-5	50 J	13	51	1.16
13101	1,1,2-Trifluoroethane	430-66-0	54	5	13	1.16

GC/MS Semivolatiles		SW-846 8270C	ug/kg	ug/kg	ug/kg	
10723	Acenaphthene	83-32-9	2,300	37	190	5
10723	Acenaphthylene	208-96-8	2,000	37	190	5

*=This limit was used in the evaluation of the final result

Sample Description: D16-BOR-10-(0.5-1.0) MS Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304779
ELLE Group #: 1872396
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 13:50

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	GC/MS Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
10723	Acetophenone	98-86-2	2,300	180	370	5
10723	4-Aminobiphenyl	92-67-1	1,800 U	1,800	5,500	5
10723	Aniline	62-53-3	1,800 U	1,800	5,500	5
10723	Anthracene	120-12-7	2,000	37	190	5
10723	Benzidine	92-87-5	2,700 U	2,700	5,500	5
10723	Benzo(a)anthracene	56-55-3	1,700	37	190	5
10723	Benzo(a)pyrene	50-32-8	1,300	37	190	5
10723	Benzo(b)fluoranthene	205-99-2	1,600	37	190	5
10723	Benzo(g,h,i)perylene	191-24-2	1,100	37	190	5
10723	Benzo(k)fluoranthene	207-08-9	1,600	37	190	5
10723	1,1'-Biphenyl	92-52-4	3,000	180	370	5
10723	4-Bromophenyl-phenylether	101-55-3	2,200	180	370	5
10723	Butylbenzylphthalate	85-68-7	2,900	730	1,800	5
10723	Di-n-butylphthalate	84-74-2	2,400	730	1,800	5
10723	Carbazole	86-74-8	2,000	180	370	5
10723	4-Chloro-3-methylphenol	59-50-7	2,500	180	370	5
10723	4-Chloroaniline	106-47-8	5,900	370	730	5
10723	bis(2-Chloroethoxy)methane	111-91-1	2,200	180	370	5
10723	bis(2-Chloroethyl)ether	111-44-4	2,300	180	370	5
10723	2-Chloronaphthalene	91-58-7	2,200	73	360	5
10723	2-Chlorophenol	95-57-8	2,300	180	370	5
10723	4-Chlorophenyl-phenylether	7005-72-3	2,200	180	370	5
10723	2,2'-oxybis(1-Chloropropane)	108-60-1	2,400	180	370	5
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.					
10723	Chrysene	218-01-9	1,800	37	190	5
10723	Dibenz(a,h)anthracene	53-70-3	1,300	37	190	5
10723	Dibenzofuran	132-64-9	2,200	180	370	5
10723	3,3'-Dichlorobenzidine	91-94-1	1,100 U	1,100	3,700	5
10723	2,4-Dichlorophenol	120-83-2	2,200	180	370	5
10723	Diethylphthalate	84-66-2	1,900	730	1,800	5
10723	2,4-Dimethylphenol	105-67-9	2,000	180	370	5
10723	Dimethylphthalate	131-11-3	2,200	730	1,800	5
10723	4,6-Dinitro-2-methylphenol	534-52-1	1,800 U	1,800	5,500	5
10723	2,4-Dinitrophenol	51-28-5	3,300 U	3,300	11,000	5
10723	2,4-Dinitrotoluene	121-14-2	1,200 J	730	1,800	5
10723	2,6-Dinitrotoluene	606-20-2	1,600	180	370	5
10723	1,4-Dioxane	123-91-1	1,700 J	1,100	3,700	5
10723	Diphenyl ether	101-84-8	2,800	180	370	5
10723	1,2-Diphenylhydrazine	122-66-7	2,500	180	370	5
10723	bis(2-Ethylhexyl)phthalate	117-81-7	3,600	730	1,900	5

*=This limit was used in the evaluation of the final result

Sample Description: D16-BOR-10-(0.5-1.0) MS Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304779
ELLE Group #: 1872396
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 13:50

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	GC/MS Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
10723	Fluoranthene	206-44-0	2,200	37	190	5
10723	Fluorene	86-73-7	2,200	37	190	5
10723	Hexachlorobenzene	118-74-1	2,100	37	190	5
10723	Hexachlorobutadiene	87-68-3	2,100	180	370	5
10723	Hexachlorocyclopentadiene	77-47-4	1,800 U	1,800	5,500	5
10723	Hexachloroethane	67-72-1	370 U	370	1,800	5
10723	Indeno(1,2,3-cd)pyrene	193-39-5	1,100	37	190	5
10723	Isophorone	78-59-1	2,200	180	370	5
10723	2-Methylnaphthalene	91-57-6	2,700	37	190	5
10723	2-Methylphenol	95-48-7	2,400	180	370	5
10723	4-Methylphenol	106-44-5	2,300	180	370	5
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
10723	Naphthalene	91-20-3	3,300	37	190	5
10723	1-Naphthylamine	134-32-7	1,800 U	1,800	5,500	5
10723	2-Naphthylamine	91-59-8	1,800 U	1,800	5,500	5
10723	2-Nitroaniline	88-74-4	3,300	180	370	5
10723	3-Nitroaniline	99-09-2	1,400 J	730	1,800	5
10723	4-Nitroaniline	100-01-6	1,700 J	730	1,800	5
10723	Nitrobenzene	98-95-3	2,300	180	370	5
10723	2-Nitrophenol	88-75-5	680	180	370	5
10723	4-Nitrophenol	100-02-7	2,100 J	1,800	5,500	5
10723	N-Nitrosodimethylamine	62-75-9	2,100	730	1,800	5
10723	N-Nitroso-di-n-propylamine	621-64-7	2,300	180	370	5
10723	N-Nitrosodiphenylamine	86-30-6	2,200	180	370	5
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
10723	Di-n-octylphthalate	117-84-0	2,500	730	1,800	5
10723	Parathion	56-38-2	2,400 J	1,800	5,500	5
10723	Pentachlorobenzene	608-93-5	2,100	180	370	5
10723	Pentachlorophenol	87-86-5	1,400 J	370	1,900	5
10723	Phenanthrene	85-01-8	2,500	37	190	5
10723	Phenol	108-95-2	2,400	180	370	5
10723	Pyrene	129-00-0	2,200	37	190	5
10723	2,3,4,6-Tetrachlorophenol	58-90-2	2,000	730	1,800	5
10723	o-Toluidine	95-53-4	2,200 U	2,200	7,300	5
10723	1,2,4-Trichlorobenzene	120-82-1	3,800	180	370	5
10723	2,4,5-Trichlorophenol	95-95-4	2,100	180	370	5
10723	2,4,6-Trichlorophenol	88-06-2	2,100	180	370	5

The project QA/QC requirements were not met.

Project defined QC acceptance limits are not met. All QC is

*=This limit was used in the evaluation of the final result

Sample Description: D16-BOR-10-(0.5-1.0) MS Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304779
ELLE Group #: 1872396
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 13:50

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
compliant with the laboratory statistically generated limits.						
Reporting limits were raised due to interference from the sample matrix.						
Metals	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	32,300	16.8	37.7	1
01650	Calcium	7440-70-2	5,400	6.27	37.7	1
01654	Iron	7439-89-6	38,600	15.2	37.7	1
01657	Magnesium	7439-95-4	7,000	4.57	18.8	1
01662	Potassium	7440-09-7	7,090	31.4	94.1	1
01667	Sodium	7440-23-5	2,790	31.4	188	1
06972	Zinc	7440-66-6	529	0.452	3.77	1
SW-846 6020						
06124	Antimony	7440-36-0	2.91	0.175	0.377	2
06125	Arsenic	7440-38-2	22.8	0.241	0.753	2
06126	Barium	7440-39-3	151	0.342	0.753	2
06127	Beryllium	7440-41-7	2.57	0.0197	0.188	2
06128	Cadmium	7440-43-9	3.40	0.0648	0.188	2
06131	Chromium	7440-47-3	99.2	0.328	0.753	2
06132	Cobalt	7440-48-4	107	0.0587	0.188	2
06133	Copper	7440-50-8	93.2	0.202	0.753	2
06135	Lead	7439-92-1	124	0.0418	0.377	2
06137	Manganese	7439-96-5	1,030	0.340	0.753	2
06139	Nickel	7440-02-0	59.1	0.375	0.753	2
06141	Selenium	7782-49-2	4.78	0.188	0.753	2
06142	Silver	7440-22-4	19.7	0.0550	0.188	2
06145	Thallium	7440-28-0	0.916	0.0471	0.188	2
06148	Vanadium	7440-62-2	90.4	0.0802	0.188	2
SW-846 7471A						
00159	Mercury	7439-97-6	0.795	0.0206	0.206	1
Wet Chemistry	SW-846 9060A modified		mg/kg	mg/kg	mg/kg	
02079	Total Organic Carbon (TOC)	n.a.	319,000	7,370	22,100	1
Wet Chemistry	SM 2540 G-1997		%	%	%	
00118	%Moisture Calc	n.a.	54.6	0.50	0.50	1
00118	Moisture	n.a.	54.6	0.50	0.50	1

Sample Comments

State of New Jersey Lab Certification No. PA011

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

*=This limit was used in the evaluation of the final result



Sample Description: D16-BOR-10-(0.5-1.0) MS Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304779
ELLE Group #: 1872396
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 13:50

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	TCL Volatiles + Add'l Cmpds	SW-846 8260B	1	R173182AA	11/14/2017 14:54	Jennifer K Howe	62.5
13101	Freons	SW-846 8260FRN Modified	1	J173211AA	11/17/2017 17:32	Kevin A Sposito	1.16
08389	GC/MS - LL Encore Prep	SW-846 5035A	1	201731247803	11/08/2017 14:42	Rebecca Williams	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	2	201731247803	11/08/2017 14:43	Rebecca Williams	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	3	201731247803	11/08/2017 14:44	Rebecca Williams	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	4	201731247803	11/08/2017 14:45	Rebecca Williams	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035A	1	201731247803	11/08/2017 14:41	Rebecca Williams	n.a.
10723	TCL SVOAs + Add'l Cmpds	SW-846 8270C	1	17317SLE026	11/16/2017 05:10	Anthony P Bauer	5
10813	BNA Soil Microwave APP IX	SW-846 3546	1	17317SLE026	11/14/2017 02:50	Samantha M Metzgar	1
01643	Aluminum	SW-846 6010B	1	173120570804	11/13/2017 03:35	Jonathan J Allen	1
01650	Calcium	SW-846 6010B	1	173120570804	11/13/2017 03:35	Jonathan J Allen	1
01654	Iron	SW-846 6010B	1	173120570804	11/13/2017 03:35	Jonathan J Allen	1
01657	Magnesium	SW-846 6010B	1	173120570804	11/13/2017 03:35	Jonathan J Allen	1
01662	Potassium	SW-846 6010B	1	173120570804	11/13/2017 03:35	Jonathan J Allen	1
01667	Sodium	SW-846 6010B	1	173120570804	11/13/2017 03:35	Jonathan J Allen	1
06972	Zinc	SW-846 6010B	1	173120570804	11/13/2017 03:35	Jonathan J Allen	1
06124	Antimony	SW-846 6020	1	173120570804A	11/21/2017 18:30	Bradley M Berlot	2
06125	Arsenic	SW-846 6020	1	173120570804A	11/17/2017 12:47	Choon Y Tian	2
06126	Barium	SW-846 6020	1	173120570804D	11/17/2017 12:47	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	173120570804A	11/17/2017 12:47	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	173120570804A	11/17/2017 12:47	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	173120570804A	11/17/2017 12:47	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	173120570804A	11/17/2017 12:47	Choon Y Tian	2
06133	Copper	SW-846 6020	1	173120570804A	11/17/2017 12:47	Choon Y Tian	2
06135	Lead	SW-846 6020	1	173120570804A	11/17/2017 12:47	Choon Y Tian	2
06137	Manganese	SW-846 6020	1	173120570804A	11/17/2017 12:47	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	173120570804A	11/17/2017 12:47	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	173120570804B	11/17/2017 12:47	Choon Y Tian	2
06142	Silver	SW-846 6020	1	173120570804A	11/17/2017 12:47	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	173120570804A	11/17/2017 12:47	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	173120570804A	11/17/2017 12:47	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	173120571101	11/09/2017 09:49	Damary Valentin	1
05708	ICP-ICPMS - SW, 3050B - U3	SW-846 3050B	1	173120570804	11/09/2017 17:05	Barbara A Kane	1
05711	Hg-SW, 7471A - U3	SW-846 7471A	1	173120571101	11/09/2017 07:36	James L Mertz	1
02079	Total Organic Carbon (TOC)	SW-846 9060A modified	1	17321667631B	11/17/2017 21:20	Drew M Gerhart	1
00118	Moisture	SM 2540 G-1997 %Moisture Calc	1	17313820011A	11/10/2017 09:29	Larry E Bevins	1

*=This limit was used in the evaluation of the final result

Sample Description: D16-BOR-10-(0.5-1.0) MSD Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304780
ELLE Group #: 1872396
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15

Collection Date/Time: 11/07/2017 13:50

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	GC/MS Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	
10237	Acetone	67-64-1	21,000	910	2,600	59.1
10237	Benzene	71-43-2	2,600	65	650	59.1
10237	Bromodichloromethane	75-27-4	2,500	130	650	59.1
10237	2-Butanone	78-93-3	15,000	520	1,300	59.1
10237	n-Butylbenzene	104-51-8	2,300	130	650	59.1
10237	sec-Butylbenzene	135-98-8	2,300	130	650	59.1
10237	tert-Butylbenzene	98-06-6	2,200	130	650	59.1
10237	Carbon Disulfide	75-15-0	2,000	130	650	59.1
10237	Carbon Tetrachloride	56-23-5	2,300	130	650	59.1
10237	Chlorobenzene	108-90-7	12,000	130	650	59.1
10237	Chloroethane	75-00-3	1,800	260	650	59.1
10237	Chloroform	67-66-3	2,600	130	650	59.1
10237	Chloromethane	74-87-3	1,400	260	650	59.1
10237	2-Chlorotoluene	95-49-8	2,300	130	650	59.1
10237	4-Chlorotoluene	106-43-4	2,200	130	650	59.1
10237	Dibromochloromethane	124-48-1	2,300	130	650	59.1
10237	1,2-Dibromoethane	106-93-4	2,400	130	650	59.1
10237	1,2-Dichlorobenzene	95-50-1	3,100	130	650	59.1
10237	1,3-Dichlorobenzene	541-73-1	3,200	130	650	59.1
10237	1,4-Dichlorobenzene	106-46-7	6,800	130	650	59.1
10237	Dichlorodifluoromethane	75-71-8	540 J	260	650	59.1
10237	1,1-Dichloroethane	75-34-3	2,500	130	650	59.1
10237	1,2-Dichloroethane	107-06-2	2,700	130	650	59.1
10237	1,1-Dichloroethene	75-35-4	2,200	130	650	59.1
10237	cis-1,2-Dichloroethene	156-59-2	2,700	130	650	59.1
10237	trans-1,2-Dichloroethene	156-60-5	2,500	130	650	59.1
10237	1,2-Dichloroethene (Total)	540-59-0	5,200	130	650	59.1
10237	Dichlorofluoromethane	75-43-4	2,500	260	650	59.1
10237	1,2-Dichloropropane	78-87-5	2,600	130	650	59.1
10237	1,1-Dichloropropene	563-58-6	2,300	130	650	59.1
10237	cis-1,3-Dichloropropene	10061-01-5	2,600	130	650	59.1
10237	Ethylbenzene	100-41-4	2,300	130	650	59.1
10237	Freon 113	76-13-1	1,600	260	1,300	59.1
10237	n-Hexane	110-54-3	1,200	130	650	59.1
10237	2-Hexanone	591-78-6	11,000	390	1,300	59.1
10237	Isobutyl Alcohol	78-83-1	52,000	13,000	33,000	59.1
10237	Isopropylbenzene	98-82-8	2,800	130	650	59.1
10237	p-Isopropyltoluene	99-87-6	2,400	130	650	59.1
10237	Methacrylonitrile	126-98-7	21,000	650	6,500	59.1
10237	Methyl Methacrylate	80-62-6	2,400	130	650	59.1
10237	Methyl Tertiary Butyl Ether	1634-04-4	2,700	65	650	59.1
10237	4-Methyl-2-pentanone	108-10-1	14,000	390	1,300	59.1

*=This limit was used in the evaluation of the final result

Sample Description: D16-BOR-10-(0.5-1.0) MSD Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304780
ELLE Group #: 1872396
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 13:50

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	GC/MS Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	
10237	Methylene Chloride	75-09-2	2,700	260	650	59.1
10237	Propionitrile	107-12-0	20,000	3,900	13,000	59.1
10237	n-Propylbenzene	103-65-1	2,200	130	650	59.1
10237	Styrene	100-42-5	2,200	130	650	59.1
10237	1,1,1,2-Tetrachloroethane	630-20-6	2,300	130	650	59.1
10237	1,1,2,2-Tetrachloroethane	79-34-5	2,200	130	650	59.1
10237	Tetrachloroethene	127-18-4	2,200	130	650	59.1
10237	Tetrahydrofuran	109-99-9	11,000	520	1,000	59.1
10237	Toluene	108-88-3	2,400	130	650	59.1
10237	1,1,1-Trichloroethane	71-55-6	2,500	130	650	59.1
10237	1,1,2-Trichloroethane	79-00-5	2,400	130	650	59.1
10237	Trichloroethene	79-01-6	2,400	130	650	59.1
10237	Trichlorofluoromethane	75-69-4	1,500	260	650	59.1
10237	1,2,4-Trimethylbenzene	95-63-6	2,300	130	650	59.1
10237	1,3,5-Trimethylbenzene	108-67-8	2,200	130	650	59.1
10237	Vinyl Chloride	75-01-4	1,300	130	650	59.1
10237	m+p-Xylene	179601-23-1	4,800	130	650	59.1
10237	o-Xylene	95-47-6	2,400	130	650	59.1
10237	Xylene (Total)	1330-20-7	7,200	130	650	59.1

The NJ DKQP required reporting limit could not be attained for 1,2-dibromoethane.

The NJ DKQP analyte list requirement was not met for Method 8260B. The client specified list is reported.

Project defined QC acceptance limits are not met. All QC is compliant with the laboratory statistically generated limits.

GC/MS Volatiles		SW-846 8260FRN Modified	ug/kg	ug/kg	ug/kg	
13101	Chlorodifluoroethane	75-68-3	62	3	13	1.15
13101	Chlorodifluoromethane	75-45-6	77	5	13	1.15
13101	Chlorofluoromethane	593-70-4	56	3	13	1.15
13101	1,1-Dichloro-1-fluoroethane	1717-00-6	69	3	13	1.15
13101	1,2-Dichloro-1-fluoroethane	430-57-9	48	3	13	1.15
13101	Dichlorotetrafluoroethane	76-14-2	63	5	13	1.15
13101	1,2-Dichlorotrifluoroethane	354-23-4	60	3	13	1.15
13101	Dichlorotrifluoroethane	306-83-2	59	3	13	1.15
13101	Freon 113a	354-58-5	56	13	51	1.15
13101	1,1,2-Trifluoroethane	430-66-0	62	5	13	1.15

GC/MS Semivolatiles		SW-846 8270C	ug/kg	ug/kg	ug/kg	
10723	Acenaphthene	83-32-9	2,700	36	180	5
10723	Acenaphthylene	208-96-8	2,400	36	180	5

*=This limit was used in the evaluation of the final result

Sample Description: D16-BOR-10-(0.5-1.0) MSD Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304780
ELLE Group #: 1872396
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 13:50

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	GC/MS Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
10723	Acetophenone	98-86-2	2,500	180	360	5
10723	4-Aminobiphenyl	92-67-1	1,800 U	1,800	5,400	5
10723	Aniline	62-53-3	1,800 U	1,800	5,400	5
10723	Anthracene	120-12-7	2,500	36	180	5
10723	Benzidine	92-87-5	2,700 U	2,700	5,400	5
10723	Benzo(a)anthracene	56-55-3	2,300	36	180	5
10723	Benzo(a)pyrene	50-32-8	1,800	36	180	5
10723	Benzo(b)fluoranthene	205-99-2	2,100	36	180	5
10723	Benzo(g,h,i)perylene	191-24-2	1,600	36	180	5
10723	Benzo(k)fluoranthene	207-08-9	2,100	36	180	5
10723	1,1'-Biphenyl	92-52-4	2,900	180	360	5
10723	4-Bromophenyl-phenylether	101-55-3	2,600	180	360	5
10723	Butylbenzylphthalate	85-68-7	3,300	720	1,800	5
10723	Di-n-butylphthalate	84-74-2	2,600	720	1,800	5
10723	Carbazole	86-74-8	2,200	180	360	5
10723	4-Chloro-3-methylphenol	59-50-7	2,600	180	360	5
10723	4-Chloroaniline	106-47-8	6,200	360	720	5
10723	bis(2-Chloroethoxy)methane	111-91-1	2,400	180	360	5
10723	bis(2-Chloroethyl)ether	111-44-4	2,600	180	360	5
10723	2-Chloronaphthalene	91-58-7	2,600	72	360	5
10723	2-Chlorophenol	95-57-8	2,500	180	360	5
10723	4-Chlorophenyl-phenylether	7005-72-3	2,400	180	360	5
10723	2,2'-oxybis(1-Chloropropane)	108-60-1	2,700	180	360	5
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.					
10723	Chrysene	218-01-9	2,400	36	180	5
10723	Dibenz(a,h)anthracene	53-70-3	1,700	36	180	5
10723	Dibenzofuran	132-64-9	2,500	180	360	5
10723	3,3'-Dichlorobenzidine	91-94-1	1,100 U	1,100	3,600	5
10723	2,4-Dichlorophenol	120-83-2	2,500	180	360	5
10723	Diethylphthalate	84-66-2	2,100	720	1,800	5
10723	2,4-Dimethylphenol	105-67-9	2,200	180	360	5
10723	Dimethylphthalate	131-11-3	2,400	720	1,800	5
10723	4,6-Dinitro-2-methylphenol	534-52-1	1,800 U	1,800	5,400	5
10723	2,4-Dinitrophenol	51-28-5	3,300 U	3,300	11,000	5
10723	2,4-Dinitrotoluene	121-14-2	2,000	720	1,800	5
10723	2,6-Dinitrotoluene	606-20-2	2,200	180	360	5
10723	1,4-Dioxane	123-91-1	1,900 J	1,100	3,600	5
10723	Diphenyl ether	101-84-8	2,700	180	360	5
10723	1,2-Diphenylhydrazine	122-66-7	2,800	180	360	5
10723	bis(2-Ethylhexyl)phthalate	117-81-7	3,400	720	1,800	5

*=This limit was used in the evaluation of the final result

Sample Description: D16-BOR-10-(0.5-1.0) MSD Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304780
ELLE Group #: 1872396
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 13:50

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	GC/MS Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
10723	Fluoranthene	206-44-0	2,500	36	180	5
10723	Fluorene	86-73-7	2,600	36	180	5
10723	Hexachlorobenzene	118-74-1	2,500	36	180	5
10723	Hexachlorobutadiene	87-68-3	2,400	180	360	5
10723	Hexachlorocyclopentadiene	77-47-4	1,800 U	1,800	5,400	5
10723	Hexachloroethane	67-72-1	360 U	360	1,800	5
10723	Indeno(1,2,3-cd)pyrene	193-39-5	1,700	36	180	5
10723	Isophorone	78-59-1	2,400	180	360	5
10723	2-Methylnaphthalene	91-57-6	2,900	36	180	5
10723	2-Methylphenol	95-48-7	2,700	180	360	5
10723	4-Methylphenol	106-44-5	2,700	180	360	5
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
10723	Naphthalene	91-20-3	3,300	36	180	5
10723	1-Naphthylamine	134-32-7	1,800 U	1,800	5,400	5
10723	2-Naphthylamine	91-59-8	1,800 U	1,800	5,400	5
10723	2-Nitroaniline	88-74-4	3,400	180	360	5
10723	3-Nitroaniline	99-09-2	1,400 J	720	1,800	5
10723	4-Nitroaniline	100-01-6	2,200	720	1,800	5
10723	Nitrobenzene	98-95-3	2,500	180	360	5
10723	2-Nitrophenol	88-75-5	1,400	180	360	5
10723	4-Nitrophenol	100-02-7	2,500 J	1,800	5,400	5
10723	N-Nitrosodimethylamine	62-75-9	2,400	720	1,800	5
10723	N-Nitroso-di-n-propylamine	621-64-7	2,500	180	360	5
10723	N-Nitrosodiphenylamine	86-30-6	2,400	180	360	5
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
10723	Di-n-octylphthalate	117-84-0	2,600	720	1,800	5
10723	Parathion	56-38-2	2,400 J	1,800	5,400	5
10723	Pentachlorobenzene	608-93-5	2,400	180	360	5
10723	Pentachlorophenol	87-86-5	1,900	360	1,800	5
10723	Phenanthrene	85-01-8	2,700	36	180	5
10723	Phenol	108-95-2	2,700	180	360	5
10723	Pyrene	129-00-0	2,400	36	180	5
10723	2,3,4,6-Tetrachlorophenol	58-90-2	2,200	720	1,800	5
10723	o-Toluidine	95-53-4	2,200 U	2,200	7,200	5
10723	1,2,4-Trichlorobenzene	120-82-1	2,800	180	360	5
10723	2,4,5-Trichlorophenol	95-95-4	2,400	180	360	5
10723	2,4,6-Trichlorophenol	88-06-2	2,600	180	360	5

The project QA/QC requirements were not met.

Project defined QC acceptance limits are not met. All QC is

*=This limit was used in the evaluation of the final result

Sample Description: D16-BOR-10-(0.5-1.0) MSD Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304780
ELLE Group #: 1872396
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 13:50

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
compliant with the laboratory statistically generated limits.						
Reporting limits were raised due to interference from the sample matrix.						
Metals	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	30,200	15.8	35.2	1
01650	Calcium	7440-70-2	5,350	5.87	35.2	1
01654	Iron	7439-89-6	37,100	14.2	35.2	1
01657	Magnesium	7439-95-4	7,410	4.28	17.6	1
01662	Potassium	7440-09-7	6,890	29.4	88.1	1
01667	Sodium	7440-23-5	2,820	29.4	176	1
06972	Zinc	7440-66-6	377	0.423	3.52	1
	SW-846 6020		mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	2.73	0.164	0.352	2
06125	Arsenic	7440-38-2	20.8	0.226	0.705	2
06126	Barium	7440-39-3	143	0.320	0.705	2
06127	Beryllium	7440-41-7	2.43	0.0185	0.176	2
06128	Cadmium	7440-43-9	3.36	0.0606	0.176	2
06131	Chromium	7440-47-3	95.7	0.307	0.705	2
06132	Cobalt	7440-48-4	99.4	0.0550	0.176	2
06133	Copper	7440-50-8	94.0	0.189	0.705	2
06135	Lead	7439-92-1	140	0.0391	0.352	2
06137	Manganese	7439-96-5	898	0.319	0.705	2
06139	Nickel	7440-02-0	56.2	0.351	0.705	2
06141	Selenium	7782-49-2	4.63	0.176	0.705	2
06142	Silver	7440-22-4	18.6	0.0515	0.176	2
06145	Thallium	7440-28-0	0.860	0.0441	0.176	2
06148	Vanadium	7440-62-2	89.2	0.0751	0.176	2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.692	0.0217	0.217	1
Wet Chemistry	SW-846 9060A modified		mg/kg	mg/kg	mg/kg	
02079	Total Organic Carbon (TOC)	n.a.	285,000	6,650	20,000	1
Wet Chemistry	SM 2540 G-1997		%	%	%	
00118	%Moisture Calc	n.a.	54.6	0.50	0.50	1
00118	Moisture	n.a.	54.6	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: D16-BOR-10-(0.5-1.0) MSD Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304780
ELLE Group #: 1872396
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 13:50

Sample Comments

State of New Jersey Lab Certification No. PA011

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	TCL Volatiles + Add'l Cmpds	SW-846 8260B	1	R173182AA	11/14/2017 15:18	Jennifer K Howe	59.1
13101	Freons	SW-846 8260FRN Modified	1	J173211AA	11/17/2017 18:02	Kevin A Sposito	1.15
08389	GC/MS - LL Encore Prep	SW-846 5035A	1	201731247803	11/08/2017 14:49	Rebecca Williams	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	2	201731247803	11/08/2017 14:48	Rebecca Williams	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	3	201731247803	11/08/2017 14:50	Rebecca Williams	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	4	201731247803	11/08/2017 14:51	Rebecca Williams	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035A	1	201731247803	11/08/2017 14:47	Rebecca Williams	n.a.
10723	TCL SVOAs + Add'l Cmpds	SW-846 8270C	1	17317SLE026	11/16/2017 05:34	Anthony P Bauer	5
10813	BNA Soil Microwave APP IX	SW-846 3546	1	17317SLE026	11/14/2017 02:50	Samantha M Metzgar	1
01643	Aluminum	SW-846 6010B	1	173120570804	11/13/2017 03:38	Jonathan J Allen	1
01650	Calcium	SW-846 6010B	1	173120570804	11/13/2017 03:38	Jonathan J Allen	1
01654	Iron	SW-846 6010B	1	173120570804	11/13/2017 03:38	Jonathan J Allen	1
01657	Magnesium	SW-846 6010B	1	173120570804	11/13/2017 03:38	Jonathan J Allen	1
01662	Potassium	SW-846 6010B	1	173120570804	11/13/2017 03:38	Jonathan J Allen	1
01667	Sodium	SW-846 6010B	1	173120570804	11/13/2017 03:38	Jonathan J Allen	1
06972	Zinc	SW-846 6010B	1	173120570804	11/13/2017 03:38	Jonathan J Allen	1
06124	Antimony	SW-846 6020	1	173120570804A	11/17/2017 12:50	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	173120570804A	11/17/2017 12:50	Choon Y Tian	2
06126	Barium	SW-846 6020	1	173120570804D	11/17/2017 12:50	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	173120570804A	11/17/2017 12:50	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	173120570804A	11/17/2017 12:50	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	173120570804A	11/17/2017 12:50	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	173120570804A	11/17/2017 12:50	Choon Y Tian	2
06133	Copper	SW-846 6020	1	173120570804A	11/17/2017 12:50	Choon Y Tian	2
06135	Lead	SW-846 6020	1	173120570804A	11/17/2017 12:50	Choon Y Tian	2
06137	Manganese	SW-846 6020	1	173120570804A	11/17/2017 12:50	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	173120570804A	11/17/2017 12:50	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	173120570804B	11/17/2017 12:50	Choon Y Tian	2
06142	Silver	SW-846 6020	1	173120570804A	11/17/2017 12:50	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	173120570804A	11/17/2017 12:50	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	173120570804A	11/17/2017 12:50	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	173120571101	11/09/2017 09:51	Damary Valentin	1
05708	ICP-ICPMS - SW, 3050B - U3	SW-846 3050B	1	173120570804	11/09/2017 17:05	Barbara A Kane	1
05711	Hg-SW, 7471A - U3	SW-846 7471A	1	173120571101	11/09/2017 07:36	James L Mertz	1
02079	Total Organic Carbon (TOC)	SW-846 9060A modified	1	17321667631B	11/17/2017 21:33	Drew M Gerhart	1
00118	Moisture	SM 2540 G-1997 %Moisture Calc	1	17313820011A	11/10/2017 09:29	Larry E Bevins	1

*=This limit was used in the evaluation of the final result

Sample Description: D16-BOR-10-(0.5-1.0) DupI Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304781
ELLE Group #: 1872396
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 13:50

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	SW-846 6010B		mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	24,500	15.6	35.0	1
01650	Calcium	7440-70-2	4,170	5.82	35.0	1
01654	Iron	7439-89-6	35,900	14.1	35.0	1
01657	Magnesium	7439-95-4	6,220	4.25	17.5	1
01662	Potassium	7440-09-7	3,730	29.2	87.4	1
01667	Sodium	7440-23-5	937	29.2	175	1
06972	Zinc	7440-66-6	341	0.420	3.50	1
	SW-846 6020		mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.943	0.163	0.350	2
06125	Arsenic	7440-38-2	18.2	0.224	0.699	2
06126	Barium	7440-39-3	130	0.317	0.699	2
06127	Beryllium	7440-41-7	1.27	0.0183	0.175	2
06128	Cadmium	7440-43-9	1.92	0.0601	0.175	2
06131	Chromium	7440-47-3	82.6	0.304	0.699	2
06132	Cobalt	7440-48-4	17.8	0.0545	0.175	2
06133	Copper	7440-50-8	71.9	0.187	0.699	2
06135	Lead	7439-92-1	113	0.0388	0.350	2
06137	Manganese	7439-96-5	1,120	0.316	0.699	2
06139	Nickel	7440-02-0	42.0	0.348	0.699	2
06141	Selenium	7782-49-2	1.06	0.175	0.699	2
06142	Silver	7440-22-4	1.04	0.0510	0.175	2
06145	Thallium	7440-28-0	0.287	0.0437	0.175	2
06148	Vanadium	7440-62-2	71.9	0.0745	0.175	2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.422	0.0220	0.220	1
Wet Chemistry	SW-846 9060A modified		mg/kg	mg/kg	mg/kg	
02079	Total Organic Carbon (TOC)	n.a.	49,000	2,530	7,590	1
Wet Chemistry	SM 2540 G-1997 %Moisture Calc		%	%	%	
00118	Moisture	n.a.	54.6	0.50	0.50	1
00121	Moisture Duplicate	n.a.	48.2	0.50	0.50	1

The duplicate moisture value is provided to assess the precision of the moisture test. For comparability purposes, the initial moisture determination is the value used to perform dry weight calculations.

*=This limit was used in the evaluation of the final result

Sample Description: D16-BOR-10-(0.5-1.0) DupI Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304781
ELLE Group #: 1872396
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 13:50

Sample Comments

State of New Jersey Lab Certification No. PA011

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01643	Aluminum	SW-846 6010B	1	173120570804	11/13/2017 03:31	Jonathan J Allen	1
01650	Calcium	SW-846 6010B	1	173120570804	11/13/2017 03:31	Jonathan J Allen	1
01654	Iron	SW-846 6010B	1	173120570804	11/13/2017 03:31	Jonathan J Allen	1
01657	Magnesium	SW-846 6010B	1	173120570804	11/13/2017 03:31	Jonathan J Allen	1
01662	Potassium	SW-846 6010B	1	173120570804	11/13/2017 03:31	Jonathan J Allen	1
01667	Sodium	SW-846 6010B	1	173120570804	11/13/2017 03:31	Jonathan J Allen	1
06972	Zinc	SW-846 6010B	1	173120570804	11/13/2017 03:31	Jonathan J Allen	1
06124	Antimony	SW-846 6020	1	173120570804A	11/17/2017 12:44	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	173120570804A	11/17/2017 12:44	Choon Y Tian	2
06126	Barium	SW-846 6020	1	173120570804D	11/17/2017 12:44	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	173120570804A	11/17/2017 12:44	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	173120570804A	11/17/2017 12:44	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	173120570804A	11/17/2017 12:44	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	173120570804A	11/17/2017 12:44	Choon Y Tian	2
06133	Copper	SW-846 6020	1	173120570804A	11/17/2017 12:44	Choon Y Tian	2
06135	Lead	SW-846 6020	1	173120570804A	11/17/2017 12:44	Choon Y Tian	2
06137	Manganese	SW-846 6020	1	173120570804A	11/17/2017 12:44	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	173120570804A	11/17/2017 12:44	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	173120570804B	11/17/2017 12:44	Choon Y Tian	2
06142	Silver	SW-846 6020	1	173120570804A	11/17/2017 12:44	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	173120570804A	11/17/2017 12:44	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	173120570804A	11/17/2017 12:44	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	173120571101	11/09/2017 09:47	Damary Valentin	1
05708	ICP-ICPMS - SW, 3050B - U3	SW-846 3050B	1	173120570804	11/09/2017 17:05	Barbara A Kane	1
05711	Hg-SW, 7471A - U3	SW-846 7471A	1	173120571101	11/09/2017 07:36	James L Mertz	1
02079	Total Organic Carbon (TOC)	SW-846 9060A modified	1	17321667631B	11/17/2017 21:46	Drew M Gerhart	1
00118	Moisture	SM 2540 G-1997 %Moisture Calc	1	17313820011A	11/10/2017 09:29	Larry E Bevins	1
00121	Moisture Duplicate	SM 2540 G-1997 %Moisture Calc	1	17313820011A	11/10/2017 09:29	Larry E Bevins	1

*=This limit was used in the evaluation of the final result

Sample Description: D16-BOR-10-(5.0-5.5) Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304782
ELLE Group #: 1872396
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 14:25

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	GC/MS Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	
10237	Acetone	67-64-1	44	7	21	0.98
10237	Benzene	71-43-2	0.5 U	0.5	5	0.98
10237	Bromodichloromethane	75-27-4	1 U	1	5	0.98
10237	2-Butanone	78-93-3	4 U	4	11	0.98
10237	n-Butylbenzene	104-51-8	1 U	1	5	0.98
10237	sec-Butylbenzene	135-98-8	1 U	1	5	0.98
10237	tert-Butylbenzene	98-06-6	1 U	1	5	0.98
10237	Carbon Disulfide	75-15-0	1 U	1	5	0.98
10237	Carbon Tetrachloride	56-23-5	1 U	1	5	0.98
10237	Chlorobenzene	108-90-7	1 U	1	5	0.98
10237	Chloroethane	75-00-3	2 U	2	5	0.98
10237	Chloroform	67-66-3	1 U	1	5	0.98
10237	Chloromethane	74-87-3	2 U	2	5	0.98
10237	2-Chlorotoluene	95-49-8	1 U	1	5	0.98
10237	4-Chlorotoluene	106-43-4	1 U	1	5	0.98
10237	Chlorotrifluoroethene	79-38-9	2 U	2	5	0.98
10237	Dibromochloromethane	124-48-1	1 U	1	5	0.98
10237	1,2-Dibromoethane	106-93-4	1 U	1	5	0.98
10237	1,2-Dichlorobenzene	95-50-1	1 U	1	5	0.98
10237	1,3-Dichlorobenzene	541-73-1	1 U	1	5	0.98
10237	1,4-Dichlorobenzene	106-46-7	1 U	1	5	0.98
10237	Dichlorodifluoromethane	75-71-8	2 U	2	5	0.98
10237	1,1-Dichloroethane	75-34-3	1 U	1	5	0.98
10237	1,2-Dichloroethane	107-06-2	1 U	1	5	0.98
10237	1,1-Dichloroethene	75-35-4	1 U	1	5	0.98
10237	cis-1,2-Dichloroethene	156-59-2	1 U	1	5	0.98
10237	trans-1,2-Dichloroethene	156-60-5	1 U	1	5	0.98
10237	1,2-Dichloroethene (Total)	540-59-0	1 U	1	5	0.98
10237	Dichlorofluoromethane	75-43-4	2 U	2	5	0.98
10237	1,2-Dichloropropane	78-87-5	1 U	1	5	0.98
10237	1,1-Dichloropropene	563-58-6	1 U	1	5	0.98
10237	cis-1,3-Dichloropropene	10061-01-5	1 U	1	5	0.98
10237	Ethylbenzene	100-41-4	1 U	1	5	0.98
10237	Freon 113	76-13-1	2 U	2	11	0.98
10237	Freon 133a	75-88-7	2 U	2	5	0.98
10237	n-Hexane	110-54-3	1 U	1	5	0.98
10237	2-Hexanone	591-78-6	3 U	3	11	0.98
10237	Isobutyl Alcohol	78-83-1	110 U	110	270	0.98
10237	Isopropylbenzene	98-82-8	1 U	1	5	0.98
10237	p-Isopropyltoluene	99-87-6	1 U	1	5	0.98
10237	Methacrylonitrile	126-98-7	5 U	5	53	0.98
10237	Methyl Methacrylate	80-62-6	1 U	1	5	0.98

*=This limit was used in the evaluation of the final result

Sample Description: D16-BOR-10-(5.0-5.5) Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304782
ELLE Group #: 1872396
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 14:25

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Volatiles SW-846 8260B						
10237	Methyl Tertiary Butyl Ether	1634-04-4	0.5 U	0.5	5	0.98
10237	4-Methyl-2-pentanone	108-10-1	3 U	3	11	0.98
10237	Methylene Chloride	75-09-2	2 J	2	5	0.98
10237	Propionitrile	107-12-0	32 U	32	110	0.98
10237	n-Propylbenzene	103-65-1	1 U	1	5	0.98
10237	Styrene	100-42-5	1 U	1	5	0.98
10237	1,1,1,2-Tetrachloroethane	630-20-6	1 U	1	5	0.98
10237	1,1,2,2-Tetrachloroethane	79-34-5	1 U	1	5	0.98
10237	Tetrachloroethene	127-18-4	1 U	1	5	0.98
10237	Tetrahydrofuran	109-99-9	4 U	4	9	0.98
10237	Toluene	108-88-3	1 U	1	5	0.98
10237	1,1,1-Trichloroethane	71-55-6	1 U	1	5	0.98
10237	1,1,2-Trichloroethane	79-00-5	1 U	1	5	0.98
10237	Trichloroethene	79-01-6	1 U	1	5	0.98
10237	Trichlorofluoromethane	75-69-4	2 U	2	5	0.98
10237	1,2,4-Trimethylbenzene	95-63-6	1 U	1	5	0.98
10237	1,3,5-Trimethylbenzene	108-67-8	1 U	1	5	0.98
10237	Vinyl Chloride	75-01-4	1 U	1	5	0.98
10237	m+p-Xylene	179601-23-1	1 U	1	5	0.98
10237	o-Xylene	95-47-6	1 U	1	5	0.98
10237	Xylene (Total)	1330-20-7	1 U	1	5	0.98

The NJ DKQP analyte list requirement was not met for Method 8260B. The client specified list is reported.

GC/MS Volatiles	SW-846 8260FRN Modified	ug/kg	ug/kg	ug/kg		
13101	Chlorodifluoroethane	75-68-3	1 U	1	5	0.97
13101	Chlorodifluoromethane	75-45-6	2 U	2	5	0.97
13101	Chlorofluoromethane	593-70-4	1 U	1	5	0.97
13101	Chloropentafluoroethane	76-15-3	16 U	16	53	0.97
13101	1,1-Dichloro-1-fluoroethane	1717-00-6	1 U	1	5	0.97
13101	1,2-Dichloro-1-fluoroethane	430-57-9	1 U	1	5	0.97
13101	Dichlorotetrafluoroethane	76-14-2	2 U	2	5	0.97
13101	1,2-Dichlorotrifluoroethane	354-23-4	1 U	1	5	0.97
13101	Dichlorotrifluoroethane	306-83-2	1 U	1	5	0.97
13101	Fluoromethane	593-53-3	3 UZ	3	11	0.97
13101	Freon 113a	354-58-5	5 U	5	21	0.97
13101	1,1,2-Trifluoroethane	430-66-0	2 U	2	5	0.97
13101	Vinyl fluoride	75-02-5	6 UZ	6	21	0.97

Z= The response for a target analyte(s) in the continuing calibration verification standard is outside the QC acceptance limits. Since the response is high indicating increased sensitivity, and the target analyte(s) is not detected in the sample, the data is reported.

*=This limit was used in the evaluation of the final result

Sample Description: D16-BOR-10-(5.0-5.5) Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304782
ELLE Group #: 1872396
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 14:25

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
00884 Volatile Library Search - 15						
The results from the volatile library search are listed on the attached FORM 1 - VOA-TIC. The qualifiers appearing in the "Q" column are defined at the end of the report.						
GC/MS Semivolatiles	SW-846 8270C		ug/kg	ug/kg	ug/kg	
10723	Acenaphthene	83-32-9	4 U	4	18	1
10723	Acenaphthylene	208-96-8	4 U	4	18	1
10723	Acetophenone	98-86-2	18 U	18	36	1
10723	4-Aminobiphenyl	92-67-1	180 UZ	180	540	1
10723	Aniline	62-53-3	180 U	180	540	1
10723	Anthracene	120-12-7	4 U	4	18	1
10723	Benzidine	92-87-5	270 U	270	540	1
10723	Benzo(a)anthracene	56-55-3	4 U	4	18	1
10723	Benzo(a)pyrene	50-32-8	4 U	4	18	1
10723	Benzo(b)fluoranthene	205-99-2	4 U	4	18	1
10723	Benzo(g,h,i)perylene	191-24-2	4 U	4	18	1
10723	Benzo(k)fluoranthene	207-08-9	4 U	4	18	1
10723	1,1'-Biphenyl	92-52-4	18 U	18	36	1
10723	4-Bromophenyl-phenylether	101-55-3	18 U	18	36	1
10723	Butylbenzylphthalate	85-68-7	71 U	71	180	1
10723	Di-n-butylphthalate	84-74-2	71 U	71	180	1
10723	Carbazole	86-74-8	18 U	18	36	1
10723	4-Chloro-3-methylphenol	59-50-7	18 U	18	36	1
10723	4-Chloroaniline	106-47-8	36 U	36	71	1
10723	bis(2-Chloroethoxy)methane	111-91-1	18 U	18	36	1
10723	bis(2-Chloroethyl)ether	111-44-4	18 U	18	36	1
10723	2-Chloronaphthalene	91-58-7	7 U	7	35	1
10723	2-Chlorophenol	95-57-8	18 U	18	36	1
10723	4-Chlorophenyl-phenylether	7005-72-3	18 U	18	36	1
10723	2,2'-oxybis(1-Chloropropane)	108-60-1	18 U	18	36	1
Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10723	Chrysene	218-01-9	4 U	4	18	1
10723	Dibenz(a,h)anthracene	53-70-3	4 U	4	18	1
10723	Dibenzofuran	132-64-9	18 U	18	36	1
10723	3,3'-Dichlorobenzidine	91-94-1	110 U	110	360	1
10723	2,4-Dichlorophenol	120-83-2	18 U	18	36	1
10723	Diethylphthalate	84-66-2	71 U	71	180	1
10723	2,4-Dimethylphenol	105-67-9	18 U	18	36	1
10723	Dimethylphthalate	131-11-3	71 U	71	180	1
10723	4,6-Dinitro-2-methylphenol	534-52-1	180 U	180	540	1
10723	2,4-Dinitrophenol	51-28-5	320 U	320	1,100	1

*=This limit was used in the evaluation of the final result

Sample Description: D16-BOR-10-(5.0-5.5) Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304782
ELLE Group #: 1872396
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 14:25

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	GC/MS Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
10723	2,4-Dinitrotoluene	121-14-2	71 U	71	180	1
10723	2,6-Dinitrotoluene	606-20-2	18 U	18	36	1
10723	1,4-Dioxane	123-91-1	110 U	110	360	1
10723	Diphenyl ether	101-84-8	18 U	18	36	1
10723	1,2-Diphenylhydrazine	122-66-7	18 U	18	36	1
10723	bis(2-Ethylhexyl)phthalate	117-81-7	71 U	71	180	1
10723	Fluoranthene	206-44-0	4 U	4	18	1
10723	Fluorene	86-73-7	4 U	4	18	1
10723	Hexachlorobenzene	118-74-1	4 U	4	18	1
10723	Hexachlorobutadiene	87-68-3	18 U	18	36	1
10723	Hexachlorocyclopentadiene	77-47-4	180 U	180	540	1
10723	Hexachloroethane	67-72-1	36 U	36	180	1
10723	Indeno(1,2,3-cd)pyrene	193-39-5	4 U	4	18	1
10723	Isophorone	78-59-1	18 U	18	36	1
10723	2-Methylnaphthalene	91-57-6	4 U	4	18	1
10723	2-Methylphenol	95-48-7	18 U	18	36	1
10723	4-Methylphenol	106-44-5	18 U	18	36	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
10723	Naphthalene	91-20-3	4 U	4	18	1
10723	1-Naphthylamine	134-32-7	180 U	180	540	1
10723	2-Naphthylamine	91-59-8	180 U	180	540	1
10723	2-Nitroaniline	88-74-4	18 U	18	36	1
10723	3-Nitroaniline	99-09-2	71 U	71	180	1
10723	4-Nitroaniline	100-01-6	71 U	71	180	1
10723	Nitrobenzene	98-95-3	18 U	18	36	1
10723	2-Nitrophenol	88-75-5	18 U	18	36	1
10723	4-Nitrophenol	100-02-7	180 U	180	540	1
10723	N-Nitrosodimethylamine	62-75-9	71 U	71	180	1
10723	N-Nitroso-di-n-propylamine	621-64-7	18 U	18	36	1
10723	N-Nitrosodiphenylamine	86-30-6	18 U	18	36	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
10723	Di-n-octylphthalate	117-84-0	71 U	71	180	1
10723	Parathion	56-38-2	180 U	180	540	1
10723	Pentachlorobenzene	608-93-5	18 U	18	36	1
10723	Pentachlorophenol	87-86-5	36 U	36	180	1
10723	Phenanthrene	85-01-8	4 U	4	18	1
10723	Phenol	108-95-2	18 U	18	36	1
10723	Pyrene	129-00-0	4 U	4	18	1
10723	2,3,4,6-Tetrachlorophenol	58-90-2	71 U	71	180	1

*=This limit was used in the evaluation of the final result

Sample Description: D16-BOR-10-(5.0-5.5) Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304782
ELLE Group #: 1872396
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 14:25

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	GC/MS Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
10723	o-Tolidine	95-53-4	210 U	210	710	1
10723	1,2,4-Trichlorobenzene	120-82-1	18 U	18	36	1
10723	2,4,5-Trichlorophenol	95-95-4	18 U	18	36	1
10723	2,4,6-Trichlorophenol	88-06-2	18 U	18	36	1

The project QA/QC requirements were not met.

Project defined QC acceptance limits are not met. All QC is compliant with the laboratory statistically generated limits.

The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. Since the recovery is high and the target analyte(s) was not detected in the sample, the data is reported.

Z=The response for a target analyte(s) in the initial calibration verification standard is outside the QC acceptance limits. Since the response is high indicating increased sensitivity, and the target analyte(s) is not detected in the sample, the data is reported.

00886 SVOA Library Search - 25

The results from the semivolatile library search are listed on the attached FORM 1 - SV-TIC. The qualifiers appearing in the "Q" column are defined at the end of the report.

Wet Chemistry	SW-846 9060A modified	mg/kg	mg/kg	mg/kg	
02079 Total Organic Carbon (TOC)	n.a.	190 J	108	325	1

Due to the nature of this sample matrix, the sample cup was filled to capacity with less than 1000 mg of sample being used. The lowered sample weight has resulted in a raised reporting limit.

Wet Chemistry	SM 2540 G-1997	%	%	%	
00111 Moisture	n.a.	7.6	0.50	0.50	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

Sample Comments

State of New Jersey Lab Certification No. PA011

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

*=This limit was used in the evaluation of the final result

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Sample Description: D16-BOR-10-(5.0-5.5) Soil
DE RIVER NAPL DELINEATION PHASE III**CRG-The Chemours Co. FC, LLC**
ELLE Sample #: SW 9304782
ELLE Group #: 1872396
Matrix: Soil**Project Name:** CWK - DE RIVER NAPL DELINEATION PHASE IIISubmittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 14:25**Laboratory Sample Analysis Record**

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	TCL Volatiles + Add'l Cmpds	SW-846 8260B	1	X173182AA	11/14/2017 14:53	Linda C Pape	0.98
13101	Freons	SW-846 8260FRN Modified	1	J173191AA	11/15/2017 17:05	Kevin A Sposito	0.97
08389	GC/MS - LL Encore Prep	SW-846 5035A	1	201731247803	11/08/2017 14:54	Rebecca Williams	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	2	201731247803	11/08/2017 14:55	Rebecca Williams	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	3	201731247803	11/08/2017 14:58	Rebecca Williams	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	4	201731247803	11/08/2017 14:59	Rebecca Williams	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035A	1	201731247803	11/08/2017 14:53	Rebecca Williams	n.a.
10723	TCL SVOAs + Add'l Cmpds	SW-846 8270C	1	17317SLE026	11/16/2017 05:58	Anthony P Bauer	1
10813	BNA Soil Microwave APP IX	SW-846 3546	1	17317SLE026	11/14/2017 02:50	Samantha M Metzgar	1
02079	Total Organic Carbon (TOC)	SW-846 9060A modified	1	17321667631A	11/17/2017 19:11	Drew M Gerhart	1
00111	Moisture	SM 2540 G-1997 %Moisture Calc	1	17313820011A	11/10/2017 09:29	Larry E Bevins	1

*=This limit was used in the evaluation of the final result

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1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

! _____ !
! DRN-3 !

Lab Name: Lancaster Laboratories Contract: _____
Lab Code: LANCAS Case No.: SAS No.: SDG No.:
Matrix: (soil/water) SOIL Lab Sample ID: 9304782
Sample wt/vol: 5.09 (g/mL) g Lab File ID: HP09193.i/17nov14a.b/xn14s40.d
Level: (low/med) LOW Date Received: 11/07/17
% Moisture: not dec. 7.6 Date Analyzed: 11/14/17
Column: (pack/cap) CAP Dilution Factor: 1.0
Number TICs found: 0 CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. VOCTIC	Total VOC TICs		0	U
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FORM I VOA-TIC

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

! _____ !
! DRN-3 !

Lab Name: Lancaster Laboratories Contract: _____
Lab Code: LANCAS Case No.: _____ SAS No.: _____ SDG No.: _____
Matrix: (soil/water) SOIL Lab Sample ID: 9304782
Sample wt/vol: 30.29 (g/mL) g Lab File ID: pk0575.d
Level: (low/med) LOW Date Received: 11/07/17
% Moisture: 7.6 Decanted: (Y/N) Date Extracted: 11/14/17
Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/16/17
Injection Volume: 1 (uL) Dilution Factor: 1
GPC Cleanup: N pH: Extraction: Mic

CONCENTRATION UNITS:

Number TICs found: 3 (ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.625-86-5	Furan, 2,5-dimethyl-	1.907	140	JB
2.	Unknown Aldol Condensate	4.007	530	JB
3.80-05-7	Phenol, 4,4'-(1-methylethylidene)-	11.830	150	J
4.				
5.SVOCTIC	Total SVOC TICs		820	JB
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FORM I SV-1

Sample Description: D16-BOR-10-(6.0-6.5) Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304783
ELLE Group #: 1872396
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 14:30

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	GC/MS Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	
10237	Acetone	67-64-1	94	7	21	0.97
10237	Benzene	71-43-2	0.5 U	0.5	5	0.97
10237	Bromodichloromethane	75-27-4	1 U	1	5	0.97
10237	2-Butanone	78-93-3	4 U	4	11	0.97
10237	n-Butylbenzene	104-51-8	1 U	1	5	0.97
10237	sec-Butylbenzene	135-98-8	1 U	1	5	0.97
10237	tert-Butylbenzene	98-06-6	1 U	1	5	0.97
10237	Carbon Disulfide	75-15-0	1 U	1	5	0.97
10237	Carbon Tetrachloride	56-23-5	1 U	1	5	0.97
10237	Chlorobenzene	108-90-7	1 U	1	5	0.97
10237	Chloroethane	75-00-3	2 U	2	5	0.97
10237	Chloroform	67-66-3	1 U	1	5	0.97
10237	Chloromethane	74-87-3	2 U	2	5	0.97
10237	2-Chlorotoluene	95-49-8	1 U	1	5	0.97
10237	4-Chlorotoluene	106-43-4	1 U	1	5	0.97
10237	Chlorotrifluoroethene	79-38-9	2 U	2	5	0.97
10237	Dibromochloromethane	124-48-1	1 U	1	5	0.97
10237	1,2-Dibromoethane	106-93-4	1 U	1	5	0.97
10237	1,2-Dichlorobenzene	95-50-1	1 U	1	5	0.97
10237	1,3-Dichlorobenzene	541-73-1	1 U	1	5	0.97
10237	1,4-Dichlorobenzene	106-46-7	1 U	1	5	0.97
10237	Dichlorodifluoromethane	75-71-8	2 U	2	5	0.97
10237	1,1-Dichloroethane	75-34-3	1 U	1	5	0.97
10237	1,2-Dichloroethane	107-06-2	1 U	1	5	0.97
10237	1,1-Dichloroethene	75-35-4	1 U	1	5	0.97
10237	cis-1,2-Dichloroethene	156-59-2	1 U	1	5	0.97
10237	trans-1,2-Dichloroethene	156-60-5	1 U	1	5	0.97
10237	1,2-Dichloroethene (Total)	540-59-0	1 U	1	5	0.97
10237	Dichlorofluoromethane	75-43-4	2 U	2	5	0.97
10237	1,2-Dichloropropane	78-87-5	1 U	1	5	0.97
10237	1,1-Dichloropropene	563-58-6	1 U	1	5	0.97
10237	cis-1,3-Dichloropropene	10061-01-5	1 U	1	5	0.97
10237	Ethylbenzene	100-41-4	1 U	1	5	0.97
10237	Freon 113	76-13-1	2 U	2	11	0.97
10237	Freon 133a	75-88-7	2 U	2	5	0.97
10237	n-Hexane	110-54-3	1 U	1	5	0.97
10237	2-Hexanone	591-78-6	3 U	3	11	0.97
10237	Isobutyl Alcohol	78-83-1	110 U	110	270	0.97
10237	Isopropylbenzene	98-82-8	1 U	1	5	0.97
10237	p-Isopropyltoluene	99-87-6	1 U	1	5	0.97
10237	Methacrylonitrile	126-98-7	5 U	5	53	0.97
10237	Methyl Methacrylate	80-62-6	1 U	1	5	0.97

*=This limit was used in the evaluation of the final result

Sample Description: D16-BOR-10-(6.0-6.5) Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304783
ELLE Group #: 1872396
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 14:30

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Volatiles SW-846 8260B						
10237	Methyl Tertiary Butyl Ether	1634-04-4	0.5 U	0.5	5	0.97
10237	4-Methyl-2-pentanone	108-10-1	3 U	3	11	0.97
10237	Methylene Chloride	75-09-2	3 J	2	5	0.97
10237	Propionitrile	107-12-0	32 U	32	110	0.97
10237	n-Propylbenzene	103-65-1	1 U	1	5	0.97
10237	Styrene	100-42-5	1 U	1	5	0.97
10237	1,1,1,2-Tetrachloroethane	630-20-6	1 U	1	5	0.97
10237	1,1,2,2-Tetrachloroethane	79-34-5	1 U	1	5	0.97
10237	Tetrachloroethene	127-18-4	1 U	1	5	0.97
10237	Tetrahydrofuran	109-99-9	4 U	4	9	0.97
10237	Toluene	108-88-3	1 U	1	5	0.97
10237	1,1,1-Trichloroethane	71-55-6	1 U	1	5	0.97
10237	1,1,2-Trichloroethane	79-00-5	1 U	1	5	0.97
10237	Trichloroethene	79-01-6	1 U	1	5	0.97
10237	Trichlorofluoromethane	75-69-4	2 U	2	5	0.97
10237	1,2,4-Trimethylbenzene	95-63-6	1 U	1	5	0.97
10237	1,3,5-Trimethylbenzene	108-67-8	1 U	1	5	0.97
10237	Vinyl Chloride	75-01-4	1 U	1	5	0.97
10237	m+p-Xylene	179601-23-1	1 U	1	5	0.97
10237	o-Xylene	95-47-6	1 U	1	5	0.97
10237	Xylene (Total)	1330-20-7	1 U	1	5	0.97

The NJ DKQP analyte list requirement was not met for Method 8260B. The client specified list is reported.

GC/MS Volatiles	SW-846 8260FRN Modified	ug/kg	ug/kg	ug/kg		
13101	Chlorodifluoroethane	75-68-3	1 U	1	5	0.95
13101	Chlorodifluoromethane	75-45-6	2 U	2	5	0.95
13101	Chlorofluoromethane	593-70-4	1 U	1	5	0.95
13101	Chloropentafluoroethane	76-15-3	15 U	15	52	0.95
13101	1,1-Dichloro-1-fluoroethane	1717-00-6	1 U	1	5	0.95
13101	1,2-Dichloro-1-fluoroethane	430-57-9	1 U	1	5	0.95
13101	Dichlorotetrafluoroethane	76-14-2	2 U	2	5	0.95
13101	1,2-Dichlorotrifluoroethane	354-23-4	1 U	1	5	0.95
13101	Dichlorotrifluoroethane	306-83-2	1 U	1	5	0.95
13101	Fluoromethane	593-53-3	3 UZ	3	10	0.95
13101	Freon 113a	354-58-5	5 U	5	21	0.95
13101	1,1,2-Trifluoroethane	430-66-0	2 U	2	5	0.95
13101	Vinyl fluoride	75-02-5	6 UZ	6	21	0.95

Z= The response for a target analyte(s) in the continuing calibration verification standard is outside the QC acceptance limits. Since the response is high indicating increased sensitivity, and the target analyte(s) is not detected in the sample, the data is reported.

*=This limit was used in the evaluation of the final result

Sample Description: D16-BOR-10-(6.0-6.5) Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304783
ELLE Group #: 1872396
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 14:30

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
00884 Volatile Library Search - 15						
The results from the volatile library search are listed on the attached FORM 1 - VOA-TIC. The qualifiers appearing in the "Q" column are defined at the end of the report.						
GC/MS Semivolatiles	SW-846 8270C		ug/kg	ug/kg	ug/kg	
10723	Acenaphthene	83-32-9	4 U	4	19	1
10723	Acenaphthylene	208-96-8	4 U	4	19	1
10723	Acetophenone	98-86-2	18 U	18	36	1
10723	4-Aminobiphenyl	92-67-1	180 UZ	180	550	1
10723	Aniline	62-53-3	180 U	180	550	1
10723	Anthracene	120-12-7	4 U	4	19	1
10723	Benzidine	92-87-5	270 U	270	550	1
10723	Benzo(a)anthracene	56-55-3	4 U	4	19	1
10723	Benzo(a)pyrene	50-32-8	4 U	4	19	1
10723	Benzo(b)fluoranthene	205-99-2	4 U	4	19	1
10723	Benzo(g,h,i)perylene	191-24-2	4 U	4	19	1
10723	Benzo(k)fluoranthene	207-08-9	4 U	4	19	1
10723	1,1'-Biphenyl	92-52-4	18 U	18	36	1
10723	4-Bromophenyl-phenylether	101-55-3	18 U	18	36	1
10723	Butylbenzylphthalate	85-68-7	73 U	73	180	1
10723	Di-n-butylphthalate	84-74-2	73 U	73	180	1
10723	Carbazole	86-74-8	18 U	18	36	1
10723	4-Chloro-3-methylphenol	59-50-7	18 U	18	36	1
10723	4-Chloroaniline	106-47-8	36 U	36	73	1
10723	bis(2-Chloroethoxy)methane	111-91-1	18 U	18	36	1
10723	bis(2-Chloroethyl)ether	111-44-4	18 U	18	36	1
10723	2-Chloronaphthalene	91-58-7	7 U	7	36	1
10723	2-Chlorophenol	95-57-8	18 U	18	36	1
10723	4-Chlorophenyl-phenylether	7005-72-3	18 U	18	36	1
10723	2,2'-oxybis(1-Chloropropane)	108-60-1	18 U	18	36	1
Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10723	Chrysene	218-01-9	4 U	4	19	1
10723	Dibenz(a,h)anthracene	53-70-3	4 U	4	19	1
10723	Dibenzofuran	132-64-9	18 U	18	36	1
10723	3,3'-Dichlorobenzidine	91-94-1	110 U	110	360	1
10723	2,4-Dichlorophenol	120-83-2	18 U	18	36	1
10723	Diethylphthalate	84-66-2	73 U	73	180	1
10723	2,4-Dimethylphenol	105-67-9	18 U	18	36	1
10723	Dimethylphthalate	131-11-3	73 U	73	180	1
10723	4,6-Dinitro-2-methylphenol	534-52-1	180 U	180	550	1
10723	2,4-Dinitrophenol	51-28-5	330 U	330	1,100	1

*=This limit was used in the evaluation of the final result

Sample Description: D16-BOR-10-(6.0-6.5) Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304783
ELLE Group #: 1872396
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 14:30

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	GC/MS Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
10723	2,4-Dinitrotoluene	121-14-2	73 U	73	180	1
10723	2,6-Dinitrotoluene	606-20-2	18 U	18	36	1
10723	1,4-Dioxane	123-91-1	110 U	110	360	1
10723	Diphenyl ether	101-84-8	18 U	18	36	1
10723	1,2-Diphenylhydrazine	122-66-7	18 U	18	36	1
10723	bis(2-Ethylhexyl)phthalate	117-81-7	73 U	73	190	1
10723	Fluoranthene	206-44-0	4 U	4	19	1
10723	Fluorene	86-73-7	4 U	4	19	1
10723	Hexachlorobenzene	118-74-1	4 U	4	19	1
10723	Hexachlorobutadiene	87-68-3	18 U	18	36	1
10723	Hexachlorocyclopentadiene	77-47-4	180 U	180	550	1
10723	Hexachloroethane	67-72-1	36 U	36	180	1
10723	Indeno(1,2,3-cd)pyrene	193-39-5	4 U	4	19	1
10723	Isophorone	78-59-1	18 U	18	36	1
10723	2-Methylnaphthalene	91-57-6	4 U	4	19	1
10723	2-Methylphenol	95-48-7	18 U	18	36	1
10723	4-Methylphenol	106-44-5	18 U	18	36	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
10723	Naphthalene	91-20-3	4 U	4	19	1
10723	1-Naphthylamine	134-32-7	180 U	180	550	1
10723	2-Naphthylamine	91-59-8	180 U	180	550	1
10723	2-Nitroaniline	88-74-4	18 U	18	36	1
10723	3-Nitroaniline	99-09-2	73 U	73	180	1
10723	4-Nitroaniline	100-01-6	73 U	73	180	1
10723	Nitrobenzene	98-95-3	18 U	18	36	1
10723	2-Nitrophenol	88-75-5	18 U	18	36	1
10723	4-Nitrophenol	100-02-7	180 U	180	550	1
10723	N-Nitrosodimethylamine	62-75-9	73 U	73	180	1
10723	N-Nitroso-di-n-propylamine	621-64-7	18 U	18	36	1
10723	N-Nitrosodiphenylamine	86-30-6	18 U	18	36	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
10723	Di-n-octylphthalate	117-84-0	73 U	73	180	1
10723	Parathion	56-38-2	180 U	180	550	1
10723	Pentachlorobenzene	608-93-5	18 U	18	36	1
10723	Pentachlorophenol	87-86-5	36 U	36	190	1
10723	Phenanthrene	85-01-8	4 U	4	19	1
10723	Phenol	108-95-2	18 U	18	36	1
10723	Pyrene	129-00-0	4 U	4	19	1
10723	2,3,4,6-Tetrachlorophenol	58-90-2	73 U	73	180	1

*=This limit was used in the evaluation of the final result

Sample Description: D16-BOR-10-(6.0-6.5) Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304783
ELLE Group #: 1872396
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 14:30

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	GC/MS Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
10723	o-Tolidine	95-53-4	220 U	220	730	1
10723	1,2,4-Trichlorobenzene	120-82-1	18 U	18	36	1
10723	2,4,5-Trichlorophenol	95-95-4	18 U	18	36	1
10723	2,4,6-Trichlorophenol	88-06-2	18 U	18	36	1

The project QA/QC requirements were not met.

Project defined QC acceptance limits are not met. All QC is compliant with the laboratory statistically generated limits.

The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. Since the recovery is high and the target analyte(s) was not detected in the sample, the data is reported.

Z=The response for a target analyte(s) in the initial calibration verification standard is outside the QC acceptance limits. Since the response is high indicating increased sensitivity, and the target analyte(s) is not detected in the sample, the data is reported.

00886 SVOA Library Search - 25

The results from the semivolatile library search are listed on the attached FORM 1 - SV-TIC. The qualifiers appearing in the "Q" column are defined at the end of the report.

Wet Chemistry	SW-846 9060A modified	mg/kg	mg/kg	mg/kg	
02079 Total Organic Carbon (TOC)	n.a.	230 J	111	334	1

Due to the nature of this sample matrix, the sample cup was filled to capacity with less than 1000 mg of sample being used. The lowered sample weight has resulted in a raised reporting limit.

Wet Chemistry	SM 2540 G-1997	%	%	%	
00111 Moisture	n.a.	8.5	0.50	0.50	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

Sample Comments

State of New Jersey Lab Certification No. PA011

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

*=This limit was used in the evaluation of the final result

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Sample Description: D16-BOR-10-(6.0-6.5) Soil
DE RIVER NAPL DELINEATION PHASE III**CRG-The Chemours Co. FC, LLC**
ELLE Sample #: SW 9304783
ELLE Group #: 1872396
Matrix: Soil**Project Name:** CWK - DE RIVER NAPL DELINEATION PHASE IIISubmittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 14:30**Laboratory Sample Analysis Record**

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	TCL Volatiles + Add'l Cmpds	SW-846 8260B	1	X173182AA	11/14/2017 15:16	Linda C Pape	0.97
13101	Freons	SW-846 8260FRN Modified	1	J173191AA	11/15/2017 17:35	Kevin A Sposito	0.95
08389	GC/MS - LL Encore Prep	SW-846 5035A	1	201731247803	11/08/2017 15:03	Rebecca Williams	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	2	201731247803	11/08/2017 15:04	Rebecca Williams	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	3	201731247803	11/08/2017 15:04	Rebecca Williams	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	4	201731247803	11/08/2017 15:06	Rebecca Williams	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035A	1	201731247803	11/08/2017 15:02	Rebecca Williams	n.a.
10723	TCL SVOAs + Add'l Cmpds	SW-846 8270C	1	17317SLE026	11/16/2017 06:22	Anthony P Bauer	1
10813	BNA Soil Microwave APP IX	SW-846 3546	1	17317SLE026	11/14/2017 02:50	Samantha M Metzgar	1
02079	Total Organic Carbon (TOC)	SW-846 9060A modified	1	17321667631A	11/17/2017 19:24	Drew M Gerhart	1
00111	Moisture	SM 2540 G-1997 %Moisture Calc	1	17313820011A	11/10/2017 09:29	Larry E Bevins	1

*=This limit was used in the evaluation of the final result

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1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

! _____ !
! DRN-4 !

Lab Name: Lancaster Laboratories Contract: _____
Lab Code: LANCAS Case No.: _____ SAS No.: _____ SDG No.: _____
Matrix: (soil/water) SOIL Lab Sample ID: 9304783
Sample wt/vol: 5.14 (g/mL) g Lab File ID: HP09193.i/17nov14a.b/xn14s41.d
Level: (low/med) LOW Date Received: 11/07/17
% Moisture: not dec. 8.5 Date Analyzed: 11/14/17
Column: (pack/cap) CAP Dilution Factor: 1.0
Number TICs found: 0 CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. VOCTIC	Total VOC TICs		0	U
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page 1 of 1

FORM I VOA-TIC

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

! _____ !
! DRN-4 !

Lab Name: Lancaster Laboratories Contract: _____
Lab Code: LANCAS Case No.: _____ SDG No.: _____
Matrix: (soil/water) SOIL Lab Sample ID: 9304783
Sample wt/vol: 30.05 (g/mL) g Lab File ID: pk0576.d
Level: (low/med) LOW Date Received: 11/07/17
% Moisture: 8.5 Decanted: (Y/N) Date Extracted: 11/14/17
Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/16/17
Injection Volume: 1 (uL) Dilution Factor: 1
GPC Cleanup: N pH: Extraction: Mic

CONCENTRATION UNITS:

Number TICs found: 3 (ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.625-86-5	Furan, 2,5-dimethyl-	1.907	200	JB
2.	Unknown Aldol Condensate	4.007	550	JB
3.80-05-7	Phenol, 4,4'-(1-methylethylidene)diphenyl	11.830	170	J
4.				
5.SVOCTIC	Total SVOC TICs		920	JB
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page 1 of 1

FORM I SV-1

Sample Description: D16-BOR-10-(7.0-7.3) Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304784
ELLE Group #: 1872396
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 14:50

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	GC/MS Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	
10237	Acetone	67-64-1	43	8	22	0.87
10237	Benzene	71-43-2	2 J	0.5	5	0.87
10237	Bromodichloromethane	75-27-4	1 U	1	5	0.87
10237	2-Butanone	78-93-3	4 U	4	11	0.87
10237	n-Butylbenzene	104-51-8	1 U	1	5	0.87
10237	sec-Butylbenzene	135-98-8	1 U	1	5	0.87
10237	tert-Butylbenzene	98-06-6	1 U	1	5	0.87
10237	Carbon Disulfide	75-15-0	1 U	1	5	0.87
10237	Carbon Tetrachloride	56-23-5	1 U	1	5	0.87
10237	Chlorobenzene	108-90-7	24	1	5	0.87
10237	Chloroethane	75-00-3	2 U	2	5	0.87
10237	Chloroform	67-66-3	1 U	1	5	0.87
10237	Chloromethane	74-87-3	2 U	2	5	0.87
10237	2-Chlorotoluene	95-49-8	1 U	1	5	0.87
10237	4-Chlorotoluene	106-43-4	1 U	1	5	0.87
10237	Chlorotrifluoroethene	79-38-9	2 U	2	5	0.87
10237	Dibromochloromethane	124-48-1	1 U	1	5	0.87
10237	1,2-Dibromoethane	106-93-4	1 U	1	5	0.87
10237	1,2-Dichlorobenzene	95-50-1	1 U	1	5	0.87
10237	1,3-Dichlorobenzene	541-73-1	1 U	1	5	0.87
10237	1,4-Dichlorobenzene	106-46-7	1 U	1	5	0.87
10237	Dichlorodifluoromethane	75-71-8	4 J	2	5	0.87
10237	1,1-Dichloroethane	75-34-3	1 U	1	5	0.87
10237	1,2-Dichloroethane	107-06-2	1 U	1	5	0.87
10237	1,1-Dichloroethene	75-35-4	1 U	1	5	0.87
10237	cis-1,2-Dichloroethene	156-59-2	1 U	1	5	0.87
10237	trans-1,2-Dichloroethene	156-60-5	1 U	1	5	0.87
10237	1,2-Dichloroethene (Total)	540-59-0	1 U	1	5	0.87
10237	Dichlorofluoromethane	75-43-4	3 J	2	5	0.87
10237	1,2-Dichloropropane	78-87-5	1 U	1	5	0.87
10237	1,1-Dichloropropene	563-58-6	1 U	1	5	0.87
10237	cis-1,3-Dichloropropene	10061-01-5	1 U	1	5	0.87
10237	Ethylbenzene	100-41-4	1 U	1	5	0.87
10237	Freon 113	76-13-1	2 U	2	11	0.87
10237	Freon 133a	75-88-7	2 U	2	5	0.87
10237	n-Hexane	110-54-3	1 U	1	5	0.87
10237	2-Hexanone	591-78-6	3 U	3	11	0.87
10237	Isobutyl Alcohol	78-83-1	110 U	110	270	0.87
10237	Isopropylbenzene	98-82-8	1 U	1	5	0.87
10237	p-Isopropyltoluene	99-87-6	1 U	1	5	0.87
10237	Methacrylonitrile	126-98-7	5 U	5	54	0.87
10237	Methyl Methacrylate	80-62-6	1 U	1	5	0.87

*=This limit was used in the evaluation of the final result

Sample Description: D16-BOR-10-(7.0-7.3) Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304784
ELLE Group #: 1872396
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 14:50

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Volatiles SW-846 8260B						
10237	Methyl Tertiary Butyl Ether	1634-04-4	0.5 U	0.5	5	0.87
10237	4-Methyl-2-pentanone	108-10-1	3 U	3	11	0.87
10237	Methylene Chloride	75-09-2	2 J	2	5	0.87
10237	Propionitrile	107-12-0	32 U	32	110	0.87
10237	n-Propylbenzene	103-65-1	1 U	1	5	0.87
10237	Styrene	100-42-5	1 U	1	5	0.87
10237	1,1,1,2-Tetrachloroethane	630-20-6	1 U	1	5	0.87
10237	1,1,2,2-Tetrachloroethane	79-34-5	1 U	1	5	0.87
10237	Tetrachloroethene	127-18-4	1 U	1	5	0.87
10237	Tetrahydrofuran	109-99-9	4 U	4	9	0.87
10237	Toluene	108-88-3	1 U	1	5	0.87
10237	1,1,1-Trichloroethane	71-55-6	1 U	1	5	0.87
10237	1,1,2-Trichloroethane	79-00-5	1 U	1	5	0.87
10237	Trichloroethene	79-01-6	1 U	1	5	0.87
10237	Trichlorofluoromethane	75-69-4	2 U	2	5	0.87
10237	1,2,4-Trimethylbenzene	95-63-6	1 U	1	5	0.87
10237	1,3,5-Trimethylbenzene	108-67-8	1 U	1	5	0.87
10237	Vinyl Chloride	75-01-4	1 U	1	5	0.87
10237	m+p-Xylene	179601-23-1	1 U	1	5	0.87
10237	o-Xylene	95-47-6	1 U	1	5	0.87
10237	Xylene (Total)	1330-20-7	1 U	1	5	0.87

The NJ DKQP analyte list requirement was not met for Method 8260B. The client specified list is reported.

GC/MS Volatiles	SW-846 8260FRN Modified	ug/kg	ug/kg	ug/kg		
13101	Chlorodifluoroethane	75-68-3	1 U	1	5	0.87
13101	Chlorodifluoromethane	75-45-6	2 U	2	5	0.87
13101	Chlorofluoromethane	593-70-4	1 U	1	5	0.87
13101	Chloropentafluoroethane	76-15-3	16 U	16	54	0.87
13101	1,1-Dichloro-1-fluoroethane	1717-00-6	1 U	1	5	0.87
13101	1,2-Dichloro-1-fluoroethane	430-57-9	1 U	1	5	0.87
13101	Dichlorotetrafluoroethane	76-14-2	2 U	2	5	0.87
13101	1,2-Dichlorotrifluoroethane	354-23-4	1 U	1	5	0.87
13101	Dichlorotrifluoroethane	306-83-2	1 U	1	5	0.87
13101	Fluoromethane	593-53-3	3 UZ	3	11	0.87
13101	Freon 113a	354-58-5	5 U	5	21	0.87
13101	1,1,2-Trifluoroethane	430-66-0	2 U	2	5	0.87
13101	Vinyl fluoride	75-02-5	6 UZ	6	21	0.87

Z= The response for a target analyte(s) in the continuing calibration verification standard is outside the QC acceptance limits. Since the response is high indicating increased sensitivity, and the target analyte(s) is not detected in the sample, the data is reported.

*=This limit was used in the evaluation of the final result

Sample Description: D16-BOR-10-(7.0-7.3) Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304784
ELLE Group #: 1872396
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 14:50

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
00884 Volatile Library Search - 15						
The results from the volatile library search are listed on the attached FORM 1 - VOA-TIC. The qualifiers appearing in the "Q" column are defined at the end of the report.						
GC/MS Semivolatiles	SW-846 8270C		ug/kg	ug/kg	ug/kg	
10723	Acenaphthene	83-32-9	4 U	4	21	1
10723	Acenaphthylene	208-96-8	4 U	4	21	1
10723	Acetophenone	98-86-2	21 U	21	41	1
10723	4-Aminobiphenyl	92-67-1	210 UZ	210	620	1
10723	Aniline	62-53-3	210 U	210	620	1
10723	Anthracene	120-12-7	4 U	4	21	1
10723	Benzidine	92-87-5	310 U	310	620	1
10723	Benzo(a)anthracene	56-55-3	4 U	4	21	1
10723	Benzo(a)pyrene	50-32-8	4 U	4	21	1
10723	Benzo(b)fluoranthene	205-99-2	4 U	4	21	1
10723	Benzo(g,h,i)perylene	191-24-2	4 U	4	21	1
10723	Benzo(k)fluoranthene	207-08-9	4 U	4	21	1
10723	1,1'-Biphenyl	92-52-4	21 U	21	41	1
10723	4-Bromophenyl-phenylether	101-55-3	21 U	21	41	1
10723	Butylbenzylphthalate	85-68-7	82 U	82	210	1
10723	Di-n-butylphthalate	84-74-2	82 U	82	210	1
10723	Carbazole	86-74-8	21 U	21	41	1
10723	4-Chloro-3-methylphenol	59-50-7	21 U	21	41	1
10723	4-Chloroaniline	106-47-8	41 U	41	82	1
10723	bis(2-Chloroethoxy)methane	111-91-1	21 U	21	41	1
10723	bis(2-Chloroethyl)ether	111-44-4	21 U	21	41	1
10723	2-Chloronaphthalene	91-58-7	8 U	8	41	1
10723	2-Chlorophenol	95-57-8	21 U	21	41	1
10723	4-Chlorophenyl-phenylether	7005-72-3	21 U	21	41	1
10723	2,2'-oxybis(1-Chloropropane)	108-60-1	21 U	21	41	1
Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10723	Chrysene	218-01-9	4 U	4	21	1
10723	Dibenz(a,h)anthracene	53-70-3	4 U	4	21	1
10723	Dibenzofuran	132-64-9	21 U	21	41	1
10723	3,3'-Dichlorobenzidine	91-94-1	120 U	120	410	1
10723	2,4-Dichlorophenol	120-83-2	21 U	21	41	1
10723	Diethylphthalate	84-66-2	82 U	82	210	1
10723	2,4-Dimethylphenol	105-67-9	21 U	21	41	1
10723	Dimethylphthalate	131-11-3	82 U	82	210	1
10723	4,6-Dinitro-2-methylphenol	534-52-1	210 U	210	620	1
10723	2,4-Dinitrophenol	51-28-5	370 U	370	1,200	1

*=This limit was used in the evaluation of the final result

Sample Description: D16-BOR-10-(7.0-7.3) Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304784
ELLE Group #: 1872396
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 14:50

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	GC/MS Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
10723	2,4-Dinitrotoluene	121-14-2	82 U	82	210	1
10723	2,6-Dinitrotoluene	606-20-2	21 U	21	41	1
10723	1,4-Dioxane	123-91-1	120 U	120	410	1
10723	Diphenyl ether	101-84-8	21 U	21	41	1
10723	1,2-Diphenylhydrazine	122-66-7	21 U	21	41	1
10723	bis(2-Ethylhexyl)phthalate	117-81-7	82 U	82	210	1
10723	Fluoranthene	206-44-0	4 U	4	21	1
10723	Fluorene	86-73-7	4 U	4	21	1
10723	Hexachlorobenzene	118-74-1	4 U	4	21	1
10723	Hexachlorobutadiene	87-68-3	21 U	21	41	1
10723	Hexachlorocyclopentadiene	77-47-4	210 U	210	620	1
10723	Hexachloroethane	67-72-1	41 U	41	210	1
10723	Indeno(1,2,3-cd)pyrene	193-39-5	4 U	4	21	1
10723	Isophorone	78-59-1	21 U	21	41	1
10723	2-Methylnaphthalene	91-57-6	4 U	4	21	1
10723	2-Methylphenol	95-48-7	21 U	21	41	1
10723	4-Methylphenol	106-44-5	21 U	21	41	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
10723	Naphthalene	91-20-3	4 U	4	21	1
10723	1-Naphthylamine	134-32-7	210 U	210	620	1
10723	2-Naphthylamine	91-59-8	210 U	210	620	1
10723	2-Nitroaniline	88-74-4	21 U	21	41	1
10723	3-Nitroaniline	99-09-2	82 U	82	210	1
10723	4-Nitroaniline	100-01-6	82 U	82	210	1
10723	Nitrobenzene	98-95-3	21 U	21	41	1
10723	2-Nitrophenol	88-75-5	21 U	21	41	1
10723	4-Nitrophenol	100-02-7	210 U	210	620	1
10723	N-Nitrosodimethylamine	62-75-9	82 U	82	210	1
10723	N-Nitroso-di-n-propylamine	621-64-7	21 U	21	41	1
10723	N-Nitrosodiphenylamine	86-30-6	21 U	21	41	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
10723	Di-n-octylphthalate	117-84-0	82 U	82	210	1
10723	Parathion	56-38-2	210 U	210	620	1
10723	Pentachlorobenzene	608-93-5	21 U	21	41	1
10723	Pentachlorophenol	87-86-5	41 U	41	210	1
10723	Phenanthrene	85-01-8	4 U	4	21	1
10723	Phenol	108-95-2	21 U	21	41	1
10723	Pyrene	129-00-0	4 U	4	21	1
10723	2,3,4,6-Tetrachlorophenol	58-90-2	82 U	82	210	1

*=This limit was used in the evaluation of the final result

Sample Description: D16-BOR-10-(7.0-7.3) Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304784
ELLE Group #: 1872396
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 14:50

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	GC/MS Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
10723	o-Tolidine	95-53-4	250 U	250	820	1
10723	1,2,4-Trichlorobenzene	120-82-1	21 U	21	41	1
10723	2,4,5-Trichlorophenol	95-95-4	21 U	21	41	1
10723	2,4,6-Trichlorophenol	88-06-2	21 U	21	41	1

The project QA/QC requirements were not met.

Project defined QC acceptance limits are not met. All QC is compliant with the laboratory statistically generated limits.

The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. Since the recovery is high and the target analyte(s) was not detected in the sample, the data is reported.

Z=The response for a target analyte(s) in the initial calibration verification standard is outside the QC acceptance limits. Since the response is high indicating increased sensitivity, and the target analyte(s) is not detected in the sample, the data is reported.

00886 SVOA Library Search - 25

The results from the semivolatile library search are listed on the attached FORM 1 - SV-TIC. The qualifiers appearing in the "Q" column are defined at the end of the report.

Wet Chemistry	SW-846 9060A modified	mg/kg	mg/kg	mg/kg	
02079 Total Organic Carbon (TOC)	n.a.	1,280	128	384	1
Wet Chemistry	SM 2540 G-1997	%	%	%	
00111 Moisture	%Moisture Calc	n.a.	18.8	0.50	0.50

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

Sample Comments

State of New Jersey Lab Certification No. PA011

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	TCL Volatiles + Add'l Cmpds	SW-846 8260B	1	X173182AA	11/14/2017 15:40	Linda C Pape	0.87

*=This limit was used in the evaluation of the final result

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Sample Description: D16-BOR-10-(7.0-7.3) Soil
DE RIVER NAPL DELINEATION PHASE III**CRG-The Chemours Co. FC, LLC**
ELLE Sample #: SW 9304784
ELLE Group #: 1872396
Matrix: Soil**Project Name:** CWK - DE RIVER NAPL DELINEATION PHASE IIISubmittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 14:50**Laboratory Sample Analysis Record**

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
13101	Freons	SW-846 8260FRN Modified	1	J173191AA	11/15/2017 18:05	Kevin A Sposito	0.87
08389	GC/MS - LL Encore Prep	SW-846 5035A	1	201731247803	11/08/2017 15:08	Rebecca Williams	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	2	201731247803	11/08/2017 15:09	Rebecca Williams	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	3	201731247803	11/08/2017 15:10	Rebecca Williams	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	4	201731247803	11/08/2017 15:11	Rebecca Williams	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035A	1	201731247803	11/08/2017 15:08	Rebecca Williams	n.a.
10723	TCL SVOAs + Add'l Cmpds	SW-846 8270C	1	17317SLE026	11/16/2017 06:46	Anthony P Bauer	1
10813	BNA Soil Microwave APP IX	SW-846 3546	1	17317SLE026	11/14/2017 02:50	Samantha M Metzgar	1
02079	Total Organic Carbon (TOC)	SW-846 9060A modified	1	17321667631A	11/17/2017 20:02	Drew M Gerhart	1
00111	Moisture	SM 2540 G-1997 %Moisture Calc	1	17313820011A	11/10/2017 09:29	Larry E Bevins	1

*=This limit was used in the evaluation of the final result

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1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS! _____ !
! DRN-5 !

Lab Name: Lancaster Laboratories Contract: _____
Lab Code: LANCAS Case No.: _____ SAS No.: _____ SDG No.: _____
Matrix: (soil/water) SOIL Lab Sample ID: 9304784
Sample wt/vol: 5.72 (g/mL) g Lab File ID: HP09193.i/17nov14a.b/xn14s42.d
Level: (low/med) LOW Date Received: 11/07/17
% Moisture: not dec. 18.8 Date Analyzed: 11/14/17
Column: (pack/cap) CAP Dilution Factor: 1.0
Number TICs found: 1 CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 541-05-9	Cyclotrisiloxane, hexamethyl	10.14	6	J
2.				
3. VOCTIC	Total VOC TICs		6	J
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page 1 of 1

FORM I VOA-TIC

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

! _____ !
! DRN-5 !

Lab Name: Lancaster Laboratories Contract: _____
Lab Code: LANCAS Case No.: _____ SAS No.: _____ SDG No.: _____
Matrix: (soil/water) SOIL Lab Sample ID: 9304784
Sample wt/vol: 30.02 (g/mL) g Lab File ID: pk0577.d
Level: (low/med) LOW Date Received: 11/07/17
% Moisture: 18.8 Decanted: (Y/N) Date Extracted: 11/14/17
Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/16/17
Injection Volume: 1 (uL) Dilution Factor: 1
GPC Cleanup: N pH: Extraction: Mic

CONCENTRATION UNITS:

Number TICs found: 3 (ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	!Unknown Aldol Condensate	4.007	970	JB
2.	!Unknown	5.260	180	J
3.57-10-3	!n-Hexadecanoic acid	10.954	570	J
4.	!			
5.SVOCTIC	!Total SVOC TICs		1700	JB
6.	!			
7.	!			
8.	!			
9.	!			
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12.	!			
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page 1 of 1

FORM I SV-1

Sample Description: D16-BOR-10-(11.0-11.3) Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304785
ELLE Group #: 1872396
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 14:55

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	GC/MS Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	
10237	Acetone	67-64-1	43	8	24	1.03
10237	Benzene	71-43-2	0.6 U	0.6	6	1.03
10237	Bromodichloromethane	75-27-4	1 U	1	6	1.03
10237	2-Butanone	78-93-3	5 U	5	12	1.03
10237	n-Butylbenzene	104-51-8	1 U	1	6	1.03
10237	sec-Butylbenzene	135-98-8	1 U	1	6	1.03
10237	tert-Butylbenzene	98-06-6	1 U	1	6	1.03
10237	Carbon Disulfide	75-15-0	1 U	1	6	1.03
10237	Carbon Tetrachloride	56-23-5	1 U	1	6	1.03
10237	Chlorobenzene	108-90-7	1 U	1	6	1.03
10237	Chloroethane	75-00-3	2 U	2	6	1.03
10237	Chloroform	67-66-3	1 U	1	6	1.03
10237	Chloromethane	74-87-3	2 U	2	6	1.03
10237	2-Chlorotoluene	95-49-8	1 U	1	6	1.03
10237	4-Chlorotoluene	106-43-4	1 U	1	6	1.03
10237	Chlorotrifluoroethene	79-38-9	2 U	2	6	1.03
10237	Dibromochloromethane	124-48-1	1 U	1	6	1.03
10237	1,2-Dibromoethane	106-93-4	1 U	1	6	1.03
10237	1,2-Dichlorobenzene	95-50-1	1 U	1	6	1.03
10237	1,3-Dichlorobenzene	541-73-1	1 U	1	6	1.03
10237	1,4-Dichlorobenzene	106-46-7	1 U	1	6	1.03
10237	Dichlorodifluoromethane	75-71-8	2 U	2	6	1.03
10237	1,1-Dichloroethane	75-34-3	1 U	1	6	1.03
10237	1,2-Dichloroethane	107-06-2	1 U	1	6	1.03
10237	1,1-Dichloroethene	75-35-4	1 U	1	6	1.03
10237	cis-1,2-Dichloroethene	156-59-2	1 U	1	6	1.03
10237	trans-1,2-Dichloroethene	156-60-5	1 U	1	6	1.03
10237	1,2-Dichloroethene (Total)	540-59-0	1 U	1	6	1.03
10237	Dichlorofluoromethane	75-43-4	2 U	2	6	1.03
10237	1,2-Dichloropropane	78-87-5	1 U	1	6	1.03
10237	1,1-Dichloropropene	563-58-6	1 U	1	6	1.03
10237	cis-1,3-Dichloropropene	10061-01-5	1 U	1	6	1.03
10237	Ethylbenzene	100-41-4	1 U	1	6	1.03
10237	Freon 113	76-13-1	2 U	2	12	1.03
10237	Freon 133a	75-88-7	2 U	2	6	1.03
10237	n-Hexane	110-54-3	1 U	1	6	1.03
10237	2-Hexanone	591-78-6	4 U	4	12	1.03
10237	Isobutyl Alcohol	78-83-1	120 U	120	300	1.03
10237	Isopropylbenzene	98-82-8	1 U	1	6	1.03
10237	p-Isopropyltoluene	99-87-6	1 U	1	6	1.03
10237	Methacrylonitrile	126-98-7	6 U	6	60	1.03
10237	Methyl Methacrylate	80-62-6	1 U	1	6	1.03

*=This limit was used in the evaluation of the final result

Sample Description: D16-BOR-10-(11.0-11.3) Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304785
ELLE Group #: 1872396
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 14:55

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Volatiles SW-846 8260B						
10237	Methyl Tertiary Butyl Ether	1634-04-4	0.6 U	0.6	6	1.03
10237	4-Methyl-2-pentanone	108-10-1	4 U	4	12	1.03
10237	Methylene Chloride	75-09-2	4 J	2	6	1.03
10237	Propionitrile	107-12-0	36 U	36	120	1.03
10237	n-Propylbenzene	103-65-1	1 U	1	6	1.03
10237	Styrene	100-42-5	1 U	1	6	1.03
10237	1,1,1,2-Tetrachloroethane	630-20-6	1 U	1	6	1.03
10237	1,1,2,2-Tetrachloroethane	79-34-5	1 U	1	6	1.03
10237	Tetrachloroethene	127-18-4	1 U	1	6	1.03
10237	Tetrahydrofuran	109-99-9	5 U	5	10	1.03
10237	Toluene	108-88-3	1 U	1	6	1.03
10237	1,1,1-Trichloroethane	71-55-6	1 U	1	6	1.03
10237	1,1,2-Trichloroethane	79-00-5	1 U	1	6	1.03
10237	Trichloroethene	79-01-6	1 U	1	6	1.03
10237	Trichlorofluoromethane	75-69-4	2 U	2	6	1.03
10237	1,2,4-Trimethylbenzene	95-63-6	1 U	1	6	1.03
10237	1,3,5-Trimethylbenzene	108-67-8	1 U	1	6	1.03
10237	Vinyl Chloride	75-01-4	1 U	1	6	1.03
10237	m+p-Xylene	179601-23-1	1 U	1	6	1.03
10237	o-Xylene	95-47-6	1 U	1	6	1.03
10237	Xylene (Total)	1330-20-7	1 U	1	6	1.03

The NJ DKQP analyte list requirement was not met for Method 8260B. The client specified list is reported.

GC/MS Volatiles SW-846 8260FRN Modified		ug/kg	ug/kg	ug/kg		
13101	Chlorodifluoroethane	75-68-3	1 U	1	5	0.84
13101	Chlorodifluoromethane	75-45-6	2 U	2	5	0.84
13101	Chlorofluoromethane	593-70-4	1 U	1	5	0.84
13101	Chloropentafluoroethane	76-15-3	15 U	15	50	0.84
13101	1,1-Dichloro-1-fluoroethane	1717-00-6	1 U	1	5	0.84
13101	1,2-Dichloro-1-fluoroethane	430-57-9	1 U	1	5	0.84
13101	Dichlorotetrafluoroethane	76-14-2	2 U	2	5	0.84
13101	1,2-Dichlorotrifluoroethane	354-23-4	1 U	1	5	0.84
13101	Dichlorotrifluoroethane	306-83-2	1 U	1	5	0.84
13101	Fluoromethane	593-53-3	3 U	3	10	0.84
13101	Freon 113a	354-58-5	5 U	5	20	0.84
13101	1,1,2-Trifluoroethane	430-66-0	2 U	2	5	0.84
13101	Vinyl fluoride	75-02-5	6 U	6	20	0.84

00884 Volatile Library Search - 15

The results from the volatile library search are listed on the attached FORM 1 - VOA-TIC. The qualifiers appearing in the "Q" column are defined at the end of the report.

*=This limit was used in the evaluation of the final result

Sample Description: D16-BOR-10-(11.0-11.3) Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304785
ELLE Group #: 1872396
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 14:55

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	GC/MS Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
10723	Acenaphthene	83-32-9	4 U	4	20	1
10723	Acenaphthylene	208-96-8	4 U	4	20	1
10723	Acetophenone	98-86-2	19 U	19	38	1
10723	4-Aminobiphenyl	92-67-1	190 UZ	190	580	1
10723	Aniline	62-53-3	190 U	190	580	1
10723	Anthracene	120-12-7	4 U	4	20	1
10723	Benzidine	92-87-5	290 U	290	580	1
10723	Benzo(a)anthracene	56-55-3	4 U	4	20	1
10723	Benzo(a)pyrene	50-32-8	4 U	4	20	1
10723	Benzo(b)fluoranthene	205-99-2	4 U	4	20	1
10723	Benzo(g,h,i)perylene	191-24-2	4 U	4	20	1
10723	Benzo(k)fluoranthene	207-08-9	4 U	4	20	1
10723	1,1'-Biphenyl	92-52-4	19 U	19	38	1
10723	4-Bromophenyl-phenylether	101-55-3	19 U	19	38	1
10723	Butylbenzylphthalate	85-68-7	77 U	77	190	1
10723	Di-n-butylphthalate	84-74-2	77 U	77	190	1
10723	Carbazole	86-74-8	19 U	19	38	1
10723	4-Chloro-3-methylphenol	59-50-7	19 U	19	38	1
10723	4-Chloroaniline	106-47-8	38 U	38	77	1
10723	bis(2-Chloroethoxy)methane	111-91-1	19 U	19	38	1
10723	bis(2-Chloroethyl)ether	111-44-4	19 U	19	38	1
10723	2-Chloronaphthalene	91-58-7	8 U	8	38	1
10723	2-Chlorophenol	95-57-8	19 U	19	38	1
10723	4-Chlorophenyl-phenylether	7005-72-3	19 U	19	38	1
10723	2,2'-oxybis(1-Chloropropane)	108-60-1	19 U	19	38	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.					
10723	Chrysene	218-01-9	4 U	4	20	1
10723	Dibenz(a,h)anthracene	53-70-3	4 U	4	20	1
10723	Dibenzofuran	132-64-9	19 U	19	38	1
10723	3,3'-Dichlorobenzidine	91-94-1	120 U	120	380	1
10723	2,4-Dichlorophenol	120-83-2	19 U	19	38	1
10723	Diethylphthalate	84-66-2	77 U	77	190	1
10723	2,4-Dimethylphenol	105-67-9	19 U	19	38	1
10723	Dimethylphthalate	131-11-3	77 U	77	190	1
10723	4,6-Dinitro-2-methylphenol	534-52-1	190 U	190	580	1
10723	2,4-Dinitrophenol	51-28-5	350 U	350	1,200	1
10723	2,4-Dinitrotoluene	121-14-2	77 U	77	190	1
10723	2,6-Dinitrotoluene	606-20-2	19 U	19	38	1
10723	1,4-Dioxane	123-91-1	120 U	120	380	1
10723	Diphenyl ether	101-84-8	19 U	19	38	1

*=This limit was used in the evaluation of the final result

Sample Description: D16-BOR-10-(11.0-11.3) Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304785
ELLE Group #: 1872396
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 14:55

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	GC/MS Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
10723	1,2-Diphenylhydrazine	122-66-7	19 U	19	38	1
10723	bis(2-Ethylhexyl)phthalate	117-81-7	77 U	77	200	1
10723	Fluoranthene	206-44-0	4 J	4	20	1
10723	Fluorene	86-73-7	4 U	4	20	1
10723	Hexachlorobenzene	118-74-1	4 U	4	20	1
10723	Hexachlorobutadiene	87-68-3	19 U	19	38	1
10723	Hexachlorocyclopentadiene	77-47-4	190 U	190	580	1
10723	Hexachloroethane	67-72-1	38 U	38	190	1
10723	Indeno(1,2,3-cd)pyrene	193-39-5	4 U	4	20	1
10723	Isophorone	78-59-1	19 U	19	38	1
10723	2-Methylnaphthalene	91-57-6	4 U	4	20	1
10723	2-Methylphenol	95-48-7	19 U	19	38	1
10723	4-Methylphenol	106-44-5	19 U	19	38	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
10723	Naphthalene	91-20-3	4 U	4	20	1
10723	1-Naphthylamine	134-32-7	190 U	190	580	1
10723	2-Naphthylamine	91-59-8	190 U	190	580	1
10723	2-Nitroaniline	88-74-4	19 U	19	38	1
10723	3-Nitroaniline	99-09-2	77 U	77	190	1
10723	4-Nitroaniline	100-01-6	77 U	77	190	1
10723	Nitrobenzene	98-95-3	19 U	19	38	1
10723	2-Nitrophenol	88-75-5	19 U	19	38	1
10723	4-Nitrophenol	100-02-7	190 U	190	580	1
10723	N-Nitrosodimethylamine	62-75-9	77 U	77	190	1
10723	N-Nitroso-di-n-propylamine	621-64-7	19 U	19	38	1
10723	N-Nitrosodiphenylamine	86-30-6	19 U	19	38	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
10723	Di-n-octylphthalate	117-84-0	77 U	77	190	1
10723	Parathion	56-38-2	190 U	190	580	1
10723	Pentachlorobenzene	608-93-5	19 U	19	38	1
10723	Pentachlorophenol	87-86-5	38 U	38	200	1
10723	Phenanthrene	85-01-8	7 J	4	20	1
10723	Phenol	108-95-2	19 U	19	38	1
10723	Pyrene	129-00-0	4 U	4	20	1
10723	2,3,4,6-Tetrachlorophenol	58-90-2	77 U	77	190	1
10723	o-Toluidine	95-53-4	230 U	230	770	1
10723	1,2,4-Trichlorobenzene	120-82-1	19 U	19	38	1
10723	2,4,5-Trichlorophenol	95-95-4	19 U	19	38	1
10723	2,4,6-Trichlorophenol	88-06-2	19 U	19	38	1

The project QA/QC requirements were not met.

*=This limit was used in the evaluation of the final result

Sample Description: D16-BOR-10-(11.0-11.3) Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304785
ELLE Group #: 1872396
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 14:55

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Project defined QC acceptance limits are not met. All QC is compliant with the laboratory statistically generated limits.						
The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. Since the recovery is high and the target analyte(s) was not detected in the sample, the data is reported.						
Z=The response for a target analyte(s) in the initial calibration verification standard is outside the QC acceptance limits. Since the response is high indicating increased sensitivity, and the target analyte(s) is not detected in the sample, the data is reported.						

00886 SVOA Library Search - 25

The results from the semivolatile library search are listed on the attached FORM 1 - SV-TIC. The qualifiers appearing in the "Q" column are defined at the end of the report.

Wet Chemistry	SW-846 9060A modified	mg/kg	mg/kg	mg/kg	
02079 Total Organic Carbon (TOC)	n.a.	383	124	373	1
Wet Chemistry	SM 2540 G-1997 %Moisture Calc	%	%	%	
00111 Moisture	n.a.	14.7	0.50	0.50	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

Sample Comments

State of New Jersey Lab Certification No. PA011

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	TCL Volatiles + Add'l Cmpds	SW-846 8260B	1	X173182AA	11/14/2017 16:03	Linda C Pape	1.03
13101	Freons	SW-846 8260FRN Modified	1	J173251AA	11/21/2017 18:05	Kevin A Sposito	0.84
08389	GC/MS - LL Encore Prep	SW-846 5035A	1	201731247803	11/08/2017 15:14	Rebecca Williams	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	2	201731247803	11/08/2017 15:15	Rebecca Williams	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	3	201731247803	11/08/2017 15:16	Rebecca Williams	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	4	201731247803	11/08/2017 15:17	Rebecca Williams	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035A	1	201731247803	11/08/2017 15:13	Rebecca Williams	n.a.
10723	TCL SVOAs + Add'l Cmpds	SW-846 8270C	1	17317SLE026	11/16/2017 07:10	Anthony P Bauer	1
10813	BNA Soil Microwave APP IX	SW-846 3546	1	17317SLE026	11/14/2017 02:50	Samantha M Metzgar	1

*=This limit was used in the evaluation of the final result

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Sample Description: D16-BOR-10-(11.0-11.3) Soil
DE RIVER NAPL DELINEATION PHASE III**CRG-The Chemours Co. FC, LLC**
ELLE Sample #: SW 9304785
ELLE Group #: 1872396
Matrix: Soil**Project Name:** CWK - DE RIVER NAPL DELINEATION PHASE IIISubmittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 14:55**Laboratory Sample Analysis Record**

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02079	Total Organic Carbon (TOC)	SW-846 9060A modified	1	17321667631A	11/17/2017 20:15	Drew M Gerhart	1
00111	Moisture	SM 2540 G-1997 %Moisture Calc	1	17313820011A	11/10/2017 09:29	Larry E Bevins	1

*=This limit was used in the evaluation of the final result

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1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

! _____ !
! DRN-6 !

Lab Name: Lancaster Laboratories Contract: _____
Lab Code: LANCAS Case No.: SAS No.: SDG No.:
Matrix: (soil/water) SOIL Lab Sample ID: 9304785
Sample wt/vol: 4.85 (g/mL) g Lab File ID: HP09193.i/17nov14a.b/xn14s43.d
Level: (low/med) LOW Date Received: 11/07/17
% Moisture: not dec. 14.7 Date Analyzed: 11/14/17
Column: (pack/cap) CAP Dilution Factor: 1.0
Number TICs found: 0 CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. VOCTIC	Total VOC TICs		0	U
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FORM I VOA-TIC

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1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

! _____ !
! DRN-6 !

Lab Name: Lancaster Laboratories Contract: _____
Lab Code: LANCAS Case No.: _____ SDG No.: _____
Matrix: (soil/water) SOIL Lab Sample ID: 9304785
Sample wt/vol: 30.49 (g/mL) g Lab File ID: pk0578.d
Level: (low/med) LOW Date Received: 11/07/17
% Moisture: 14.7 Decanted: (Y/N) Date Extracted: 11/14/17
Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/16/17
Injection Volume: 1 (uL) Dilution Factor: 1
GPC Cleanup: N pH: Extraction: Mic

CONCENTRATION UNITS:

Number TICs found: 2

(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.625-86-5	Furan, 2,5-dimethyl-	1.907	190	JB
2.	Unknown Aldol Condensate	4.007	640	JB
3.				
4.SVOCTIC	Total SVOC TICs		830	JB
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page 1 of 1

FORM I SV-1

Sample Description: D16-BOR-11-(0-0.5) Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304786
ELLE Group #: 1872396
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 12:15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	GC/MS Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	
10237	Acetone	67-64-1	150	15	42	1.24
10237	Benzene	71-43-2	1 U	1	11	1.24
10237	Bromodichloromethane	75-27-4	2 U	2	11	1.24
10237	2-Butanone	78-93-3	15 J	8	21	1.24
10237	n-Butylbenzene	104-51-8	2 U	2	11	1.24
10237	sec-Butylbenzene	135-98-8	2 U	2	11	1.24
10237	tert-Butylbenzene	98-06-6	2 U	2	11	1.24
10237	Carbon Disulfide	75-15-0	7 J	2	11	1.24
10237	Carbon Tetrachloride	56-23-5	2 U	2	11	1.24
10237	Chlorobenzene	108-90-7	57	2	11	1.24
10237	Chloroethane	75-00-3	4 U	4	11	1.24
10237	Chloroform	67-66-3	2 U	2	11	1.24
10237	Chloromethane	74-87-3	4 U	4	11	1.24
10237	2-Chlorotoluene	95-49-8	2 U	2	11	1.24
10237	4-Chlorotoluene	106-43-4	2 U	2	11	1.24
10237	Chlorotrifluoroethene	79-38-9	4 U	4	11	1.24
10237	Dibromochloromethane	124-48-1	2 U	2	11	1.24
10237	1,2-Dibromoethane	106-93-4	2 U	2	11	1.24
10237	1,2-Dichlorobenzene	95-50-1	7 J	2	11	1.24
10237	1,3-Dichlorobenzene	541-73-1	2 U	2	11	1.24
10237	1,4-Dichlorobenzene	106-46-7	3 J	2	11	1.24
10237	Dichlorodifluoromethane	75-71-8	4 U	4	11	1.24
10237	1,1-Dichloroethane	75-34-3	2 U	2	11	1.24
10237	1,2-Dichloroethane	107-06-2	2 U	2	11	1.24
10237	1,1-Dichloroethene	75-35-4	2 U	2	11	1.24
10237	cis-1,2-Dichloroethene	156-59-2	2 U	2	11	1.24
10237	trans-1,2-Dichloroethene	156-60-5	2 U	2	11	1.24
10237	1,2-Dichloroethene (Total)	540-59-0	2 U	2	11	1.24
10237	Dichlorofluoromethane	75-43-4	4 U	4	11	1.24
10237	1,2-Dichloropropane	78-87-5	2 U	2	11	1.24
10237	1,1-Dichloropropene	563-58-6	2 U	2	11	1.24
10237	cis-1,3-Dichloropropene	10061-01-5	2 U	2	11	1.24
10237	Ethylbenzene	100-41-4	2 U	2	11	1.24
10237	Freon 113	76-13-1	4 U	4	21	1.24
10237	Freon 133a	75-88-7	4 U	4	11	1.24
10237	n-Hexane	110-54-3	2 U	2	11	1.24
10237	2-Hexanone	591-78-6	6 U	6	21	1.24
10237	Isobutyl Alcohol	78-83-1	210 U	210	530	1.24
10237	Isopropylbenzene	98-82-8	68	2	11	1.24
10237	p-Isopropyltoluene	99-87-6	2 U	2	11	1.24
10237	Methacrylonitrile	126-98-7	11 U	11	110	1.24
10237	Methyl Methacrylate	80-62-6	2 U	2	11	1.24

*=This limit was used in the evaluation of the final result

Sample Description: D16-BOR-11-(0-0.5) Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304786
ELLE Group #: 1872396
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 12:15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Volatiles SW-846 8260B						
10237	Methyl Tertiary Butyl Ether	1634-04-4	1 U	1	11	1.24
10237	4-Methyl-2-pentanone	108-10-1	6 U	6	21	1.24
10237	Methylene Chloride	75-09-2	4 U	4	11	1.24
10237	Propionitrile	107-12-0	63 U	63	210	1.24
10237	n-Propylbenzene	103-65-1	2 U	2	11	1.24
10237	Styrene	100-42-5	2 U	2	11	1.24
10237	1,1,1,2-Tetrachloroethane	630-20-6	2 U	2	11	1.24
10237	1,1,2,2-Tetrachloroethane	79-34-5	2 U	2	11	1.24
10237	Tetrachloroethene	127-18-4	2 U	2	11	1.24
10237	Tetrahydrofuran	109-99-9	8 U	8	17	1.24
10237	Toluene	108-88-3	2 J	2	11	1.24
10237	1,1,1-Trichloroethane	71-55-6	2 U	2	11	1.24
10237	1,1,2-Trichloroethane	79-00-5	2 U	2	11	1.24
10237	Trichloroethene	79-01-6	2 U	2	11	1.24
10237	Trichlorofluoromethane	75-69-4	4 U	4	11	1.24
10237	1,2,4-Trimethylbenzene	95-63-6	2 U	2	11	1.24
10237	1,3,5-Trimethylbenzene	108-67-8	2 U	2	11	1.24
10237	Vinyl Chloride	75-01-4	2 U	2	11	1.24
10237	m+p-Xylene	179601-23-1	2 U	2	11	1.24
10237	o-Xylene	95-47-6	5 J	2	11	1.24
10237	Xylene (Total)	1330-20-7	5 J	2	11	1.24

The NJ DKQP analyte list requirement was not met for Method 8260B. The client specified list is reported.

The recovery for the sample internal standard is outside the QC acceptance limits. The following corrective action was taken:

The sample was re-analyzed and the QC is again outside of the acceptance limits, indicating a matrix effect. The data is reported from the initial trial.

GC/MS Volatiles	SW-846 8260FRN Modified	ug/kg	ug/kg	ug/kg		
13101	Chlorodifluoroethane	75-68-3	2 U	2	12	1.44
13101	Chlorodifluoromethane	75-45-6	5 U	5	12	1.44
13101	Chlorofluoromethane	593-70-4	2 U	2	12	1.44
13101	Chloropentafluoroethane	76-15-3	37 UZ	37	120	1.44
13101	1,1-Dichloro-1-fluoroethane	1717-00-6	2 U	2	12	1.44
13101	1,2-Dichloro-1-fluoroethane	430-57-9	2 U	2	12	1.44
13101	Dichlorotetrafluoroethane	76-14-2	5 U	5	12	1.44
13101	1,2-Dichlorotrifluoroethane	354-23-4	2 U	2	12	1.44
13101	Dichlorotrifluoroethane	306-83-2	2 U	2	12	1.44
13101	Fluoromethane	593-53-3	7 UZ	7	24	1.44
13101	Freon 113a	354-58-5	12 U	12	49	1.44
13101	1,1,2-Trifluoroethane	430-66-0	5 U	5	12	1.44

*=This limit was used in the evaluation of the final result

Sample Description: D16-BOR-11-(0-0.5) Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304786
ELLE Group #: 1872396
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 12:15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	GC/MS Volatiles	SW-846 8260FRN Modified	ug/kg	ug/kg	ug/kg	
13101	Vinyl fluoride	75-02-5	15 U	15	49	1.44
Z= The response for a target analyte(s) in the continuing calibration verification standard is outside the QC acceptance limits. Since the response is high indicating increased sensitivity, and the target analyte(s) is not detected in the sample, the data is reported.						
00884 Volatile Library Search - 15						
The results from the volatile library search are listed on the attached FORM 1 - VOA-TIC. The qualifiers appearing in the "Q" column are defined at the end of the report.						
	GC/MS Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
10723	Acenaphthene	83-32-9	54 J	28	140	5
10723	Acenaphthylene	208-96-8	49 J	28	140	5
10723	Acetophenone	98-86-2	140 U	140	280	5
10723	4-Aminobiphenyl	92-67-1	1,400 UZ	1,400	4,200	5
10723	Aniline	62-53-3	1,400 U	1,400	4,200	5
10723	Anthracene	120-12-7	91 J	28	140	5
10723	Benzidine	92-87-5	2,100 U	2,100	4,200	5
10723	Benzo(a)anthracene	56-55-3	180	28	140	5
10723	Benzo(a)pyrene	50-32-8	140 J	28	140	5
10723	Benzo(b)fluoranthene	205-99-2	180	28	140	5
10723	Benzo(g,h,i)perylene	191-24-2	96 J	28	140	5
10723	Benzo(k)fluoranthene	207-08-9	110 J	28	140	5
10723	1,1'-Biphenyl	92-52-4	140 U	140	280	5
10723	4-Bromophenyl-phenylether	101-55-3	140 U	140	280	5
10723	Butylbenzylphthalate	85-68-7	560 U	560	1,400	5
10723	Di-n-butylphthalate	84-74-2	560 U	560	1,400	5
10723	Carbazole	86-74-8	140 U	140	280	5
10723	4-Chloro-3-methylphenol	59-50-7	140 U	140	280	5
10723	4-Chloroaniline	106-47-8	280 U	280	560	5
10723	bis(2-Chloroethoxy)methane	111-91-1	140 U	140	280	5
10723	bis(2-Chloroethyl)ether	111-44-4	140 U	140	280	5
10723	2-Chloronaphthalene	91-58-7	56 U	56	280	5
10723	2-Chlorophenol	95-57-8	140 U	140	280	5
10723	4-Chlorophenyl-phenylether	7005-72-3	140 U	140	280	5
10723	2,2'-Oxybis(1-Chloropropane)	108-60-1	140 U	140	280	5
Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10723	Chrysene	218-01-9	360	28	140	5
10723	Dibenz(a,h)anthracene	53-70-3	28 U	28	140	5

*=This limit was used in the evaluation of the final result

Sample Description: D16-BOR-11-(0-0.5) Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304786
ELLE Group #: 1872396
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 12:15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	GC/MS Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
10723	Dibenzofuran	132-64-9	140 U	140	280	5
10723	3,3'-Dichlorobenzidine	91-94-1	840 U	840	2,800	5
10723	2,4-Dichlorophenol	120-83-2	140 U	140	280	5
10723	Diethylphthalate	84-66-2	560 U	560	1,400	5
10723	2,4-Dimethylphenol	105-67-9	140 U	140	280	5
10723	Dimethylphthalate	131-11-3	560 U	560	1,400	5
10723	4,6-Dinitro-2-methylphenol	534-52-1	1,400 U	1,400	4,200	5
10723	2,4-Dinitrophenol	51-28-5	2,500 U	2,500	8,400	5
10723	2,4-Dinitrotoluene	121-14-2	560 U	560	1,400	5
10723	2,6-Dinitrotoluene	606-20-2	140 U	140	280	5
10723	1,4-Dioxane	123-91-1	840 U	840	2,800	5
10723	Diphenyl ether	101-84-8	140 U	140	280	5
10723	1,2-Diphenylhydrazine	122-66-7	140 U	140	280	5
10723	bis(2-Ethylhexyl)phthalate	117-81-7	560 U	560	1,400	5
10723	Fluoranthene	206-44-0	290	28	140	5
10723	Fluorene	86-73-7	59 J	28	140	5
10723	Hexachlorobenzene	118-74-1	28 U	28	140	5
10723	Hexachlorobutadiene	87-68-3	140 U	140	280	5
10723	Hexachlorocyclopentadiene	77-47-4	1,400 U	1,400	4,200	5
10723	Hexachloroethane	67-72-1	280 U	280	1,400	5
10723	Indeno(1,2,3-cd)pyrene	193-39-5	68 J	28	140	5
10723	Isophorone	78-59-1	140 U	140	280	5
10723	2-Methylnaphthalene	91-57-6	86 J	28	140	5
10723	2-Methylphenol	95-48-7	140 U	140	280	5
10723	4-Methylphenol	106-44-5	140 U	140	280	5
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
10723	Naphthalene	91-20-3	250	28	140	5
10723	1-Naphthylamine	134-32-7	1,400 U	1,400	4,200	5
10723	2-Naphthylamine	91-59-8	1,400 U	1,400	4,200	5
10723	2-Nitroaniline	88-74-4	140 U	140	280	5
10723	3-Nitroaniline	99-09-2	560 U	560	1,400	5
10723	4-Nitroaniline	100-01-6	560 U	560	1,400	5
10723	Nitrobenzene	98-95-3	140 U	140	280	5
10723	2-Nitrophenol	88-75-5	140 U	140	280	5
10723	4-Nitrophenol	100-02-7	1,400 U	1,400	4,200	5
10723	N-Nitrosodimethylamine	62-75-9	560 U	560	1,400	5
10723	N-Nitroso-di-n-propylamine	621-64-7	140 U	140	280	5
10723	N-Nitrosodiphenylamine	86-30-6	140 U	140	280	5
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					

*=This limit was used in the evaluation of the final result

Sample Description: D16-BOR-11-(0-0.5) Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304786
ELLE Group #: 1872396
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 12:15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	GC/MS Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
10723	Di-n-octylphthalate	117-84-0	560 U	560	1,400	5
10723	Parathion	56-38-2	1,400 U	1,400	4,200	5
10723	Pentachlorobenzene	608-93-5	140 U	140	280	5
10723	Pentachlorophenol	87-86-5	280 U	280	1,400	5
10723	Phenanthrene	85-01-8	180	28	140	5
10723	Phenol	108-95-2	140 U	140	280	5
10723	Pyrene	129-00-0	300	28	140	5
10723	2,3,4,6-Tetrachlorophenol	58-90-2	560 U	560	1,400	5
10723	o-Toluidine	95-53-4	1,700 U	1,700	5,600	5
10723	1,2,4-Trichlorobenzene	120-82-1	140 U	140	280	5
10723	2,4,5-Trichlorophenol	95-95-4	140 U	140	280	5
10723	2,4,6-Trichlorophenol	88-06-2	140 U	140	280	5

The project QA/QC requirements were not met.

Project defined QC acceptance limits are not met. All QC is compliant with the laboratory statistically generated limits.

The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. Since the recovery is high and the target analyte(s) was not detected in the sample, the data is reported.

Z=The response for a target analyte(s) in the initial calibration verification standard is outside the QC acceptance limits. Since the response is high indicating increased sensitivity, and the target analyte(s) is not detected in the sample, the data is reported.

Reporting limits were raised due to interference from the sample matrix.

00886 SVOA Library Search - 25

The results from the semivolatile library search are listed on the attached FORM 1 - SV-TIC. The qualifiers appearing in the "Q" column are defined at the end of the report.

Metals	SW-846 6010B	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	13,800	13.6	30.4
01650	Calcium	7440-70-2	4,160	5.07	30.4
01654	Iron	7439-89-6	21,000	12.2	30.4
01657	Magnesium	7439-95-4	3,760	3.70	15.2
01662	Potassium	7440-09-7	2,400	25.4	76.1
01667	Sodium	7440-23-5	630	25.4	152
06972	Zinc	7440-66-6	129	0.365	3.04
	SW-846 6020	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.453	0.142	0.304

*=This limit was used in the evaluation of the final result

Sample Description: D16-BOR-11-(0-0.5) Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304786
ELLE Group #: 1872396
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 12:15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	SW-846 6020		mg/kg	mg/kg	mg/kg	
06125	Arsenic	7440-38-2	8.07	0.195	0.608	2
06126	Barium	7440-39-3	77.2	0.276	0.608	2
06127	Beryllium	7440-41-7	0.662	0.0159	0.152	2
06128	Cadmium	7440-43-9	0.427	0.0523	0.152	2
06131	Chromium	7440-47-3	42.1	0.265	0.608	2
06132	Cobalt	7440-48-4	10.2	0.0475	0.152	2
06133	Copper	7440-50-8	37.0	0.163	0.608	2
06135	Lead	7439-92-1	50.3	0.0338	0.304	2
06137	Manganese	7439-96-5	618	0.275	0.608	2
06139	Nickel	7440-02-0	20.9	0.303	0.608	2
06141	Selenium	7782-49-2	0.494 J	0.152	0.608	2
06142	Silver	7440-22-4	0.246	0.0444	0.152	2
06145	Thallium	7440-28-0	0.130 J	0.0380	0.152	2
06148	Vanadium	7440-62-2	34.7	0.0648	0.152	2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.517	0.0168	0.168	1
Wet Chemistry	SW-846 9060A modified		mg/kg	mg/kg	mg/kg	
02079	Total Organic Carbon (TOC)	n.a.	22,000	1,930	5,780	1
Wet Chemistry	ASTM D422		% Passing	% Passing	% Passing	
07103	75 mm	n.a.	100	0.50	0.50	1
07103	37.5 mm	n.a.	100	0.50	0.50	1
07103	19 mm	n.a.	100	0.50	0.50	1
07103	4.75 mm	n.a.	99.8	0.50	0.50	1
07103	3.35 mm	n.a.	99.6	0.50	0.50	1
07103	2.36 mm	n.a.	99.1	0.50	0.50	1
07103	1.18 mm	n.a.	98.3	0.50	0.50	1
07103	0.6 mm	n.a.	96.9	0.50	0.50	1
07103	0.3 mm	n.a.	94.2	0.50	0.50	1
07103	0.15 mm	n.a.	72.1	0.50	0.50	1
07103	0.075 mm	n.a.	57.1	0.50	0.50	1
07103	0.064 mm	n.a.	53.0	0.50	0.50	1
07103	0.05 mm	n.a.	44.0	0.50	0.50	1
07103	0.02 mm	n.a.	27.5	0.50	0.50	1
07103	0.005 mm	n.a.	10.5	0.50	0.50	1
07103	0.002 mm	n.a.	4.5	0.50	0.50	1
07103	0.001 mm	n.a.	1.0	0.50	0.50	1
Wet Chemistry	SM 2540 G-1997		%	%	%	
	%Moisture Calc					
00111	Moisture	n.a.	41.3	0.50	0.50	1

*=This limit was used in the evaluation of the final result



Sample Description: D16-BOR-11-(0-0.5) Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304786
ELLE Group #: 1872396
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 12:15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	SM 2540 G-1997 %Moisture Calc		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

Sample Comments

State of New Jersey Lab Certification No. PA011

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	TCL Volatiles + Add'l Cmpds	SW-846 8260B	1	X173182AA	11/14/2017 16:26	Linda C Pape	1.24
13101	Freons	SW-846 8260FRN	1	J173211AA	11/17/2017 14:03	Kevin A Sposito	1.44
Modified							
08389	GC/MS - LL Encore Prep	SW-846 5035A	1	201731247803	11/08/2017 15:23	Rebecca Williams	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	2	201731247803	11/08/2017 15:24	Rebecca Williams	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	3	201731247803	11/08/2017 15:25	Rebecca Williams	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	4	201731247803	11/08/2017 15:26	Rebecca Williams	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035A	1	201731247803	11/08/2017 15:22	Rebecca Williams	n.a.
10723	TCL SVOAs + Add'l Cmpds	SW-846 8270C	1	17317SLE026	11/16/2017 07:34	Anthony P Bauer	5
10813	BNA Soil Microwave APP IX	SW-846 3546	1	17317SLE026	11/14/2017 02:50	Samantha M Metzgar	1
01643	Aluminum	SW-846 6010B	1	173120570804	11/13/2017 04:32	Jonathan J Allen	1
01650	Calcium	SW-846 6010B	1	173120570804	11/13/2017 04:32	Jonathan J Allen	1
01654	Iron	SW-846 6010B	1	173120570804	11/13/2017 04:32	Jonathan J Allen	1
01657	Magnesium	SW-846 6010B	1	173120570804	11/13/2017 04:32	Jonathan J Allen	1
01662	Potassium	SW-846 6010B	1	173120570804	11/13/2017 04:32	Jonathan J Allen	1
01667	Sodium	SW-846 6010B	1	173120570804	11/13/2017 04:32	Jonathan J Allen	1
06972	Zinc	SW-846 6010B	1	173120570804	11/13/2017 04:32	Jonathan J Allen	1
06124	Antimony	SW-846 6020	1	173120570804A	11/17/2017 13:27	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	173120570804A	11/17/2017 13:27	Choon Y Tian	2
06126	Barium	SW-846 6020	1	173120570804D	11/17/2017 13:27	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	173120570804A	11/17/2017 13:27	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	173120570804A	11/29/2017 17:29	Bradley M Berlot	2
06131	Chromium	SW-846 6020	1	173120570804A	11/17/2017 13:27	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	173120570804A	11/17/2017 13:27	Choon Y Tian	2
06133	Copper	SW-846 6020	1	173120570804A	11/17/2017 13:27	Choon Y Tian	2
06135	Lead	SW-846 6020	1	173120570804A	11/17/2017 13:27	Choon Y Tian	2
06137	Manganese	SW-846 6020	1	173120570804A	11/17/2017 13:27	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	173120570804A	11/17/2017 13:27	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	173120570804B	11/17/2017 13:27	Choon Y Tian	2
06142	Silver	SW-846 6020	1	173120570804A	11/17/2017 13:27	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	173120570804A	11/17/2017 13:27	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	173120570804A	11/17/2017 13:27	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	173120571101	11/09/2017 10:11	Damary Valentin	1

*=This limit was used in the evaluation of the final result

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Sample Description: D16-BOR-11-(0-0.5) Soil
DE RIVER NAPL DELINEATION PHASE III**CRG-The Chemours Co. FC, LLC**
ELLE Sample #: SW 9304786
ELLE Group #: 1872396
Matrix: Soil**Project Name:** CWK - DE RIVER NAPL DELINEATION PHASE IIISubmittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 12:15**Laboratory Sample Analysis Record**

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05708	ICP-ICPMS - SW, 3050B - U3	SW-846 3050B	1	173120570804	11/09/2017 17:05	Barbara A Kane	1
05711	Hg-SW, 7471A - U3	SW-846 7471A	1	173120571101	11/09/2017 07:36	James L Mertz	1
02079	Total Organic Carbon (TOC)	SW-846 9060A modified	1	17321667631A	11/17/2017 20:28	Drew M Gerhart	1
07103	Grain Size to 1 um	ASTM D422	1	17336710304A	12/02/2017 13:00	Joshua P Trost	1
00111	Moisture	SM 2540 G-1997 %Moisture Calc	1	17313820011A	11/10/2017 09:29	Larry E Bevins	1

*=This limit was used in the evaluation of the final result

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1E
 VOLATILE ORGANICS ANALYSIS DATA SHEET
 TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.	! _____ !	
Contract: _____	! DRN-7 !	
Lab Name: Lancaster Laboratories	SDG No.: _____	
Lab Code: LANCAS Case No.: _____	SAS No.: _____	
Matrix: (soil/water) SOIL	Lab Sample ID: 9304786	
Sample wt/vol: 4.03 (g/mL) g	Lab File ID: HP09193.i/17nov14a.b/xn14s44.d	
Level: (low/med) LOW	Date Received: 11/07/17	
% Moisture: not dec. 41.3	Date Analyzed: 11/14/17	
Column: (pack/cap) CAP	Dilution Factor: 1.0	
CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg		

Number TICs found: 3

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	!Unknown	1.97	570	J
2.	!Unknown	2.18	130	J
3.	!Unknown	2.54	12	J
4.				
5. VOCTIC	Total VOC TICs		710	J
6.				
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FORM I VOA-TIC

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

! _____ !
! DRN-7 !

Lab Name: Lancaster Laboratories Contract: _____
Lab Code: LANCAS Case No.: _____ SDG No.: _____
Matrix: (soil/water) SOIL Lab Sample ID: 9304786
Sample wt/vol: 30.39 (g/mL) g Lab File ID: pk0579.d
Level: (low/med) LOW Date Received: 11/07/17
% Moisture: 41.3 Decanted: (Y/N) Date Extracted: 11/14/17
Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/16/17
Injection Volume: 1 (uL) Dilution Factor: 5
GPC Cleanup: N pH: Extraction: Mic

CONCENTRATION UNITS:

Number TICs found: 9 (ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.590-90-9	CH ₃ C(O)CH ₂ CH ₂ OH	3.078	6600	J
2.	Unknown Aldol Condensate	3.995	5100	JB
3.	Unknown	8.830	2200	J
4.13798-23-7	Hexathiane	9.148	3400	J
5.	Unknown	10.183	5000	J
6.	Unknown	11.471	1200	J
7.10544-50-0	Cyclic octaatomic sulfur	11.577	8800	J
8.80-05-7	Phenol, 4,4'-(1-methylethyli	11.842	5200	J
9.479-79-8	11H-Benzo[a]fluoren-11-one	13.101	140000	J
10.				
11.SVOCTIC	Total SVOC TICs		170000	JB
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FORM I SV-1

Sample Description: D16-BOR-11-(0.5-1.0) Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304787
ELLE Group #: 1872396
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 12:20

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	GC/MS Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	
10237	Acetone	67-64-1	1,100 U	1,100	3,100	68.87
10237	Benzene	71-43-2	77 U	77	770	68.87
10237	Bromodichloromethane	75-27-4	150 U	150	770	68.87
10237	2-Butanone	78-93-3	620 U	620	1,500	68.87
10237	n-Butylbenzene	104-51-8	280 J	150	770	68.87
10237	sec-Butylbenzene	135-98-8	230 J	150	770	68.87
10237	tert-Butylbenzene	98-06-6	150 U	150	770	68.87
10237	Carbon Disulfide	75-15-0	150 U	150	770	68.87
10237	Carbon Tetrachloride	56-23-5	150 U	150	770	68.87
10237	Chlorobenzene	108-90-7	6,000	150	770	68.87
10237	Chloroethane	75-00-3	310 U	310	770	68.87
10237	Chloroform	67-66-3	150 U	150	770	68.87
10237	Chloromethane	74-87-3	310 U	310	770	68.87
10237	2-Chlorotoluene	95-49-8	600 J	150	770	68.87
10237	4-Chlorotoluene	106-43-4	300 J	150	770	68.87
10237	Chlorotrifluoroethene	79-38-9	310 U	310	770	68.87
10237	Dibromochloromethane	124-48-1	150 U	150	770	68.87
10237	1,2-Dibromoethane	106-93-4	150 U	150	770	68.87
10237	1,2-Dichlorobenzene	95-50-1	300 J	150	770	68.87
10237	1,3-Dichlorobenzene	541-73-1	330 J	150	770	68.87
10237	1,4-Dichlorobenzene	106-46-7	770	150	770	68.87
10237	Dichlorodifluoromethane	75-71-8	310 U	310	770	68.87
10237	1,1-Dichloroethane	75-34-3	150 U	150	770	68.87
10237	1,2-Dichloroethane	107-06-2	150 U	150	770	68.87
10237	1,1-Dichloroethene	75-35-4	150 U	150	770	68.87
10237	cis-1,2-Dichloroethene	156-59-2	150 U	150	770	68.87
10237	trans-1,2-Dichloroethene	156-60-5	150 U	150	770	68.87
10237	1,2-Dichloroethene (Total)	540-59-0	150 U	150	770	68.87
10237	Dichlorofluoromethane	75-43-4	310 U	310	770	68.87
10237	1,2-Dichloropropane	78-87-5	150 U	150	770	68.87
10237	1,1-Dichloropropene	563-58-6	150 U	150	770	68.87
10237	cis-1,3-Dichloropropene	10061-01-5	150 U	150	770	68.87
10237	Ethylbenzene	100-41-4	150 U	150	770	68.87
10237	Freon 113	76-13-1	310 U	310	1,500	68.87
10237	Freon 133a	75-88-7	310 U	310	770	68.87
10237	n-Hexane	110-54-3	150 U	150	770	68.87
10237	2-Hexanone	591-78-6	460 U	460	1,500	68.87
10237	Isobutyl Alcohol	78-83-1	15,000 U	15,000	39,000	68.87
10237	Isopropylbenzene	98-82-8	39,000	150	770	68.87
10237	p-Isopropyltoluene	99-87-6	610 J	150	770	68.87
10237	Methacrylonitrile	126-98-7	770 U	770	7,700	68.87
10237	Methyl Methacrylate	80-62-6	150 U	150	770	68.87

*=This limit was used in the evaluation of the final result

Sample Description: D16-BOR-11-(0.5-1.0) Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304787
ELLE Group #: 1872396
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 12:20

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	GC/MS Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	
10237	Methyl Tertiary Butyl Ether	1634-04-4	77 U	77	770	68.87
10237	4-Methyl-2-pentanone	108-10-1	460 U	460	1,500	68.87
10237	Methylene Chloride	75-09-2	310 U	310	770	68.87
10237	Propionitrile	107-12-0	4,600 U	4,600	15,000	68.87
10237	n-Propylbenzene	103-65-1	150 U	150	770	68.87
10237	Styrene	100-42-5	150 U	150	770	68.87
10237	1,1,1,2-Tetrachloroethane	630-20-6	150 U	150	770	68.87
10237	1,1,2,2-Tetrachloroethane	79-34-5	150 U	150	770	68.87
10237	Tetrachloroethene	127-18-4	150 U	150	770	68.87
10237	Tetrahydrofuran	109-99-9	620 U	620	1,200	68.87
10237	Toluene	108-88-3	150 U	150	770	68.87
10237	1,1,1-Trichloroethane	71-55-6	150 U	150	770	68.87
10237	1,1,2-Trichloroethane	79-00-5	150 U	150	770	68.87
10237	Trichloroethene	79-01-6	150 U	150	770	68.87
10237	Trichlorofluoromethane	75-69-4	310 U	310	770	68.87
10237	1,2,4-Trimethylbenzene	95-63-6	660 J	150	770	68.87
10237	1,3,5-Trimethylbenzene	108-67-8	310 J	150	770	68.87
10237	Vinyl Chloride	75-01-4	150 U	150	770	68.87
10237	m+p-Xylene	179601-23-1	260 J	150	770	68.87
10237	o-Xylene	95-47-6	650 J	150	770	68.87
10237	Xylene (Total)	1330-20-7	910	150	770	68.87

The NJ DKQP required reporting limit could not be attained for 1,2-dibromoethane.

The NJ DKQP analyte list requirement was not met for Method 8260B. The client specified list is reported.

Project defined QC acceptance limits are not met. All QC is compliant with the laboratory statistically generated limits.

GC/MS Volatiles	SW-846 8260FRN Modified	ug/kg	ug/kg	ug/kg		
13101	Chlorodifluoroethane	75-68-3	2 U	2	12	1.04
13101	Chlorodifluoromethane	75-45-6	5 U	5	12	1.04
13101	Chlorofluoromethane	593-70-4	2 U	2	12	1.04
13101	Chloropentafluoroethane	76-15-3	35 UZ	35	120	1.04
13101	1,1-Dichloro-1-fluoroethane	1717-00-6	2 U	2	12	1.04
13101	1,2-Dichloro-1-fluoroethane	430-57-9	2 U	2	12	1.04
13101	Dichlorotetrafluoroethane	76-14-2	5 U	5	12	1.04
13101	1,2-Dichlorotrifluoroethane	354-23-4	2 U	2	12	1.04
13101	Dichlorotrifluoroethane	306-83-2	2 U	2	12	1.04
13101	Fluoromethane	593-53-3	7 UZ	7	23	1.04
13101	Freon 113a	354-58-5	12 U	12	47	1.04
13101	1,1,2-Trifluoroethane	430-66-0	5 U	5	12	1.04

*=This limit was used in the evaluation of the final result

Sample Description: D16-BOR-11-(0.5-1.0) Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304787
ELLE Group #: 1872396
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 12:20

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	GC/MS Volatiles	SW-846 8260FRN Modified	ug/kg	ug/kg	ug/kg	
13101	Vinyl fluoride	75-02-5	14 U	14	47	1.04
Z= The response for a target analyte(s) in the continuing calibration verification standard is outside the QC acceptance limits. Since the response is high indicating increased sensitivity, and the target analyte(s) is not detected in the sample, the data is reported.						
	GC/MS Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
10723	Acenaphthene	83-32-9	2,300	37	190	5
10723	Acenaphthylene	208-96-8	450	37	190	5
10723	Acetophenone	98-86-2	180 U	180	370	5
10723	4-Aminobiphenyl	92-67-1	1,800 UZ	1,800	5,500	5
10723	Aniline	62-53-3	1,800 U	1,800	5,500	5
10723	Anthracene	120-12-7	1,100	37	190	5
10723	Benzidine	92-87-5	2,800 U	2,800	5,500	5
10723	Benzo(a)anthracene	56-55-3	670	37	190	5
10723	Benzo(a)pyrene	50-32-8	290	37	190	5
10723	Benzo(b)fluoranthene	205-99-2	410	37	190	5
10723	Benzo(g,h,i)perylene	191-24-2	130 J	37	190	5
10723	Benzo(k)fluoranthene	207-08-9	130 J	37	190	5
10723	1,1'-Biphenyl	92-52-4	620	180	370	5
10723	4-Bromophenyl-phenylether	101-55-3	180 U	180	370	5
10723	Butylbenzylphthalate	85-68-7	6,000	740	1,800	5
10723	Di-n-butylphthalate	84-74-2	740 U	740	1,800	5
10723	Carbazole	86-74-8	180 U	180	370	5
10723	4-Chloro-3-methylphenol	59-50-7	180 U	180	370	5
10723	4-Chloroaniline	106-47-8	18,000	370	740	5
10723	bis(2-Chloroethoxy)methane	111-91-1	180 U	180	370	5
10723	bis(2-Chloroethyl)ether	111-44-4	180 U	180	370	5
10723	2-Chloronaphthalene	91-58-7	74 U	74	360	5
10723	2-Chlorophenol	95-57-8	180 U	180	370	5
10723	4-Chlorophenyl-phenylether	7005-72-3	180 U	180	370	5
10723	2,2'-oxybis(1-Chloropropane)	108-60-1	180 U	180	370	5
Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10723	Chrysene	218-01-9	1,200	37	190	5
10723	Dibenz(a,h)anthracene	53-70-3	37 U	37	190	5

*=This limit was used in the evaluation of the final result

Sample Description: D16-BOR-11-(0.5-1.0) Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304787
ELLE Group #: 1872396
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15

Collection Date/Time: 11/07/2017 12:20

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	GC/MS Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
10723	Dibenzofuran	132-64-9	1,100	180	370	5
10723	3,3'-Dichlorobenzidine	91-94-1	1,100 U	1,100	3,700	5
10723	2,4-Dichlorophenol	120-83-2	180 U	180	370	5
10723	Diethylphthalate	84-66-2	740 U	740	1,800	5
10723	2,4-Dimethylphenol	105-67-9	180 U	180	370	5
10723	Dimethylphthalate	131-11-3	740 U	740	1,800	5
10723	4,6-Dinitro-2-methylphenol	534-52-1	1,800 U	1,800	5,500	5
10723	2,4-Dinitrophenol	51-28-5	3,300 U	3,300	11,000	5
10723	2,4-Dinitrotoluene	121-14-2	740 U	740	1,800	5
10723	2,6-Dinitrotoluene	606-20-2	180 U	180	370	5
10723	1,4-Dioxane	123-91-1	1,100 U	1,100	3,700	5
10723	Diphenyl ether	101-84-8	860	180	370	5
10723	1,2-Diphenylhydrazine	122-66-7	180 U	180	370	5
10723	bis(2-Ethylhexyl)phthalate	117-81-7	2,400	740	1,900	5
10723	Fluoranthene	206-44-0	1,700	37	190	5
10723	Fluorene	86-73-7	1,600	37	190	5
10723	Hexachlorobenzene	118-74-1	37 U	37	190	5
10723	Hexachlorobutadiene	87-68-3	180 U	180	370	5
10723	Hexachlorocyclopentadiene	77-47-4	1,800 U	1,800	5,500	5
10723	Hexachloroethane	67-72-1	370 U	370	1,800	5
10723	Indeno(1,2,3-cd)pyrene	193-39-5	110 J	37	190	5
10723	Isophorone	78-59-1	180 U	180	370	5
10723	2-Methylnaphthalene	91-57-6	2,800	37	190	5
10723	2-Methylphenol	95-48-7	180 U	180	370	5
10723	4-Methylphenol	106-44-5	430	180	370	5
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
10723	Naphthalene	91-20-3	2,100	37	190	5
10723	1-Naphthylamine	134-32-7	1,800 U	1,800	5,500	5
10723	2-Naphthylamine	91-59-8	1,800 U	1,800	5,500	5
10723	2-Nitroaniline	88-74-4	180 U	180	370	5
10723	3-Nitroaniline	99-09-2	740 U	740	1,800	5
10723	4-Nitroaniline	100-01-6	740 U	740	1,800	5
10723	Nitrobenzene	98-95-3	180 U	180	370	5
10723	2-Nitrophenol	88-75-5	180 U	180	370	5
10723	4-Nitrophenol	100-02-7	1,800 U	1,800	5,500	5
10723	N-Nitrosodimethylamine	62-75-9	740 U	740	1,800	5
10723	N-Nitroso-di-n-propylamine	621-64-7	180 U	180	370	5
10723	N-Nitrosodiphenylamine	86-30-6	980	180	370	5
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					

*=This limit was used in the evaluation of the final result

Sample Description: D16-BOR-11-(0.5-1.0) Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304787
ELLE Group #: 1872396
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 12:20

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	GC/MS Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
10723	Di-n-octylphthalate	117-84-0	740 U	740	1,800	5
10723	Parathion	56-38-2	1,800 U	1,800	5,500	5
10723	Pentachlorobenzene	608-93-5	180 U	180	370	5
10723	Pentachlorophenol	87-86-5	370 U	370	1,900	5
10723	Phenanthrene	85-01-8	3,700	37	190	5
10723	Phenol	108-95-2	470	180	370	5
10723	Pyrene	129-00-0	1,600	37	190	5
10723	2,3,4,6-Tetrachlorophenol	58-90-2	740 U	740	1,800	5
10723	o-Toluidine	95-53-4	2,200 U	2,200	7,400	5
10723	1,2,4-Trichlorobenzene	120-82-1	180 U	180	370	5
10723	2,4,5-Trichlorophenol	95-95-4	180 U	180	370	5
10723	2,4,6-Trichlorophenol	88-06-2	180 U	180	370	5

The project QA/QC requirements were not met.

Project defined QC acceptance limits are not met. All QC is compliant with the laboratory statistically generated limits.

The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. Since the recovery is high and the target analyte(s) was not detected in the sample, the data is reported.

Z=The response for a target analyte(s) in the initial calibration verification standard is outside the QC acceptance limits. Since the response is high indicating increased sensitivity, and the target analyte(s) is not detected in the sample, the data is reported.

00886 SVOA Library Search - 25

The results from the semivolatile library search are listed on the attached FORM 1 - SV-TIC. The qualifiers appearing in the "Q" column are defined at the end of the report.

Metals	SW-846 6010B	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	18,700	13.5	30.2
01650	Calcium	7440-70-2	4,820	5.03	30.2
01654	Iron	7439-89-6	31,100	12.2	30.2
01657	Magnesium	7439-95-4	5,070	3.67	15.1
01662	Potassium	7440-09-7	2,850	25.2	75.6
01667	Sodium	7440-23-5	955	25.2	151
06972	Zinc	7440-66-6	255	0.363	3.02
	SW-846 6020	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	2.17	0.141	0.302
06125	Arsenic	7440-38-2	19.0	0.193	0.605
06126	Barium	7440-39-3	132	0.275	0.605

*=This limit was used in the evaluation of the final result

Sample Description: D16-BOR-11-(0.5-1.0) Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304787
ELLE Group #: 1872396
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 12:20

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	SW-846 6020		mg/kg	mg/kg	mg/kg	
06127	Beryllium	7440-41-7	0.927	0.0158	0.151	2
06128	Cadmium	7440-43-9	1.30	0.0520	0.151	2
06131	Chromium	7440-47-3	65.1	0.263	0.605	2
06132	Cobalt	7440-48-4	16.7	0.0472	0.151	2
06133	Copper	7440-50-8	165	0.162	0.605	2
06135	Lead	7439-92-1	129	0.0336	0.302	2
06137	Manganese	7439-96-5	1,220	1.37	3.02	10
06139	Nickel	7440-02-0	48.3	0.301	0.605	2
06141	Selenium	7782-49-2	1.20	0.151	0.605	2
06142	Silver	7440-22-4	0.709	0.0441	0.151	2
06145	Thallium	7440-28-0	0.254	0.0378	0.151	2
06148	Vanadium	7440-62-2	77.1	0.0644	0.151	2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.455	0.0216	0.216	1
Wet Chemistry	SW-846 9060A modified		mg/kg	mg/kg	mg/kg	
02079	Total Organic Carbon (TOC)	n.a.	84,400	3,050	9,140	1
Wet Chemistry	ASTM D422		% Passing	% Passing	% Passing	
07103	75 mm	n.a.	100	0.50	0.50	1
07103	37.5 mm	n.a.	100	0.50	0.50	1
07103	19 mm	n.a.	100	0.50	0.50	1
07103	4.75 mm	n.a.	100	0.50	0.50	1
07103	3.35 mm	n.a.	100	0.50	0.50	1
07103	2.36 mm	n.a.	99.6	0.50	0.50	1
07103	1.18 mm	n.a.	98.5	0.50	0.50	1
07103	0.6 mm	n.a.	96.0	0.50	0.50	1
07103	0.3 mm	n.a.	90.2	0.50	0.50	1
07103	0.15 mm	n.a.	82.4	0.50	0.50	1
07103	0.075 mm	n.a.	76.1	0.50	0.50	1
07103	0.064 mm	n.a.	72.5	0.50	0.50	1
07103	0.05 mm	n.a.	65.0	0.50	0.50	1
07103	0.02 mm	n.a.	42.0	0.50	0.50	1
07103	0.005 mm	n.a.	15.0	0.50	0.50	1
07103	0.002 mm	n.a.	8.5	0.50	0.50	1
07103	0.001 mm	n.a.	4.0	0.50	0.50	1
Wet Chemistry	SM 2540 G-1997		%	%	%	
	%Moisture Calc					
00111	Moisture	n.a.	55.3	0.50	0.50	1

*=This limit was used in the evaluation of the final result



Sample Description: D16-BOR-11-(0.5-1.0) Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304787
ELLE Group #: 1872396
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 12:20

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	SM 2540 G-1997 %Moisture Calc		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

Sample Comments

State of New Jersey Lab Certification No. PA011

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	TCL Volatiles + Add'l Cmpds	SW-846 8260B	1	R173182AA	11/14/2017 15:44	Jennifer K Howe	68.87
13101	Freons	SW-846 8260FRN	1	J173211AA	11/17/2017 18:32	Kevin A Sposito	1.04
Modified							
08389	GC/MS - LL Encore Prep	SW-846 5035A	1	201731247803	11/08/2017 15:29	Rebecca Williams	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	2	201731247803	11/08/2017 15:30	Rebecca Williams	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	3	201731247803	11/08/2017 15:31	Rebecca Williams	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	4	201731247803	11/08/2017 15:32	Rebecca Williams	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035A	1	201731247803	11/08/2017 15:28	Rebecca Williams	n.a.
10723	TCL SVOAs + Add'l Cmpds	SW-846 8270C	1	17317SLE026	11/16/2017 17:49	Emily Gruver	5
10813	BNA Soil Microwave APP IX	SW-846 3546	1	17317SLE026	11/14/2017 02:50	Samantha M Metzgar	1
01643	Aluminum	SW-846 6010B	1	173120570804	11/13/2017 04:43	Jonathan J Allen	1
01650	Calcium	SW-846 6010B	1	173120570804	11/13/2017 04:43	Jonathan J Allen	1
01654	Iron	SW-846 6010B	1	173120570804	11/13/2017 04:43	Jonathan J Allen	1
01657	Magnesium	SW-846 6010B	1	173120570804	11/13/2017 04:43	Jonathan J Allen	1
01662	Potassium	SW-846 6010B	1	173120570804	11/13/2017 04:43	Jonathan J Allen	1
01667	Sodium	SW-846 6010B	1	173120570804	11/13/2017 04:43	Jonathan J Allen	1
06972	Zinc	SW-846 6010B	1	173120570804	11/13/2017 04:43	Jonathan J Allen	1
06124	Antimony	SW-846 6020	1	173120570804A	11/21/2017 18:41	Bradley M Berlot	2
06125	Arsenic	SW-846 6020	1	173120570804A	11/17/2017 13:30	Choon Y Tian	2
06126	Barium	SW-846 6020	1	173120570804D	11/17/2017 13:30	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	173120570804A	11/17/2017 13:30	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	173120570804A	11/21/2017 18:41	Bradley M Berlot	2
06131	Chromium	SW-846 6020	1	173120570804A	11/17/2017 13:30	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	173120570804A	11/17/2017 13:30	Choon Y Tian	2
06133	Copper	SW-846 6020	1	173120570804A	11/17/2017 13:30	Choon Y Tian	2
06135	Lead	SW-846 6020	1	173120570804A	11/17/2017 13:30	Choon Y Tian	2
06137	Manganese	SW-846 6020	1	173120570804A	11/21/2017 18:47	Bradley M Berlot	10
06139	Nickel	SW-846 6020	1	173120570804A	11/17/2017 13:30	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	173120570804B	11/17/2017 13:30	Choon Y Tian	2
06142	Silver	SW-846 6020	1	173120570804A	11/17/2017 13:30	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	173120570804A	11/17/2017 13:30	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	173120570804A	11/17/2017 13:30	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	173120571101	11/09/2017 10:14	Damary Valentin	1

*=This limit was used in the evaluation of the final result

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Sample Description: D16-BOR-11-(0.5-1.0) Soil
DE RIVER NAPL DELINEATION PHASE III**CRG-The Chemours Co. FC, LLC**
ELLE Sample #: SW 9304787
ELLE Group #: 1872396
Matrix: Soil**Project Name:** CWK - DE RIVER NAPL DELINEATION PHASE IIISubmittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 12:20**Laboratory Sample Analysis Record**

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05708	ICP-ICPMS - SW, 3050B - U3	SW-846 3050B	1	173120570804	11/09/2017 17:05	Barbara A Kane	1
05711	Hg-SW, 7471A - U3	SW-846 7471A	1	173120571101	11/09/2017 07:36	James L Mertz	1
02079	Total Organic Carbon (TOC)	SW-846 9060A modified	1	17321667631A	11/17/2017 20:41	Drew M Gerhart	1
07103	Grain Size to 1 um	ASTM D422	1	17336710304A	12/02/2017 13:00	Joshua P Trost	1
00111	Moisture	SM 2540 G-1997 %Moisture Calc	1	17313820011A	11/10/2017 09:29	Larry E Bevins	1

*=This limit was used in the evaluation of the final result

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1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

! _____ !
! DRN-8 !

Lab Name: Lancaster Laboratories Contract: _____
Lab Code: LANCAS Case No.: _____ SAS No.: _____ SDG No.: _____
Matrix: (soil/water) SOIL Lab Sample ID: 9304787
Sample wt/vol: 3.63 (g/mL) g Lab File ID: HP07566.i/17nov14a.b/rn14s39.d
Level: (low/med) MED Date Received: 11/07/17
% Moisture: not dec. 55.3 Date Analyzed: 11/14/17
Column: (pack/cap) CAP Dilution Factor: 68.9
Number TICs found: 2 CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 99-62-7	Benzene, 1,3-bis(1-methyleth	13.86	3400	J
2. 100-18-5	Benzene, 1,4-bis(1-methyleth	14.04	1900	J
3.				
4. VOCTIC	Total VOC TICs		5300	J
5.				
6.				
7.				
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page 1 of 1

FORM I VOA-TIC

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

! _____ !

! DRN-8 !

Lab Name: Lancaster Laboratories Contract: _____
Lab Code: LANCAS Case No.: _____ SAS No.: _____ SDG No.: _____
Matrix: (soil/water) SOIL Lab Sample ID: 9304787
Sample wt/vol: 30.39 (g/mL) g Lab File ID: pk0608.d
Level: (low/med) LOW Date Received: 11/07/17
% Moisture: 55.3 Decanted: (Y/N) Date Extracted: 11/14/17
Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/16/17
Injection Volume: 1 (uL) Dilution Factor: 5
GPC Cleanup: N pH: Extraction: Mic

CONCENTRATION UNITS:

Number TICs found: 25

(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.590-90-9	CH3C(O)CH2CH2OH	3.031	26000	J
2.	Unknown Aldol Condensate	3.966	23000	JB
3.98-82-8	Benzene, (1-methylethyl)-	5.007	100000	J
4.99-62-7	Benzene, 1,3-bis(1-methylethyl)-	6.884	6100	J
5.100-18-5	Benzene, 1,4-bis(1-methylethyl)-	7.054	3900	J
6.90-12-0	Naphthalene, 1-methyl-	7.960	3500	J
7.126-73-8	Tributyl phosphate	9.583	8300	J
8.18168-40-6	Phenol, o-(.alpha.,.alpha.-d)	9.948	2800	J
9.3910-35-8	1H-Indene, 2,3-dihydro-1,1,3-	9.972	2600	J
10.1000297-95-5	4-((1E)-3-Hydroxy-1-propenyl)-	10.048	3900	J
11.	Unknown	10.172	3900	J
12.22768-22-5	2,4-Diphenyl-4-methyl-2(E)-p	10.477	3500	J
13.599-64-4	Phenol, 4-(1-methyl-1-phenyl)-	10.589	14000	J
14.2528-36-1	Phosphoric acid, dibutyl phe	10.625	6100	J
15.	Unknown	10.942	5300	J
16.20170-32-5	1,3,5-di-tert-Butyl-4-hydroxyp	11.048	1900	J
17.	Unknown	11.095	1900	J
18.84-65-1	9,10-Anthracenedione	11.142	1900	J
19.1478-61-1	4,4'-(Hexafluoroisopropylidene)	11.242	1800	J
20.10544-50-0	Cyclic octaatomic sulfur	11.566	3600	J
21.	Unknown	12.560	1600	J
22.1241-94-7	Octicizer	12.666	3000	J
23.	Unknown	13.395	4000	J
24.1000371-07-6	Phthalic acid, 4-bromobenzyl-	14.060	4300	J
25.	Unknown	14.477	9200	J
26.				
27.SVOCTIC	Total SVOC TICs		240000	JB
28.				
29.				
30.				

page 1 of 1

FORM I SV-1

Sample Description: D16-BOR-11-(5.5-6.0) Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304788
ELLE Group #: 1872396
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 12:45

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	GC/MS Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	
10237	Acetone	67-64-1	25	7	21	0.98
10237	Benzene	71-43-2	0.5 U	0.5	5	0.98
10237	Bromodichloromethane	75-27-4	1 U	1	5	0.98
10237	2-Butanone	78-93-3	4 U	4	11	0.98
10237	n-Butylbenzene	104-51-8	1 U	1	5	0.98
10237	sec-Butylbenzene	135-98-8	1 U	1	5	0.98
10237	tert-Butylbenzene	98-06-6	1 U	1	5	0.98
10237	Carbon Disulfide	75-15-0	2 J	1	5	0.98
10237	Carbon Tetrachloride	56-23-5	1 U	1	5	0.98
10237	Chlorobenzene	108-90-7	1 U	1	5	0.98
10237	Chloroethane	75-00-3	2 U	2	5	0.98
10237	Chloroform	67-66-3	1 U	1	5	0.98
10237	Chloromethane	74-87-3	2 U	2	5	0.98
10237	2-Chlorotoluene	95-49-8	1 U	1	5	0.98
10237	4-Chlorotoluene	106-43-4	1 U	1	5	0.98
10237	Chlorotrifluoroethene	79-38-9	2 U	2	5	0.98
10237	Dibromochloromethane	124-48-1	1 U	1	5	0.98
10237	1,2-Dibromoethane	106-93-4	1 U	1	5	0.98
10237	1,2-Dichlorobenzene	95-50-1	1 U	1	5	0.98
10237	1,3-Dichlorobenzene	541-73-1	1 U	1	5	0.98
10237	1,4-Dichlorobenzene	106-46-7	1 U	1	5	0.98
10237	Dichlorodifluoromethane	75-71-8	2 U	2	5	0.98
10237	1,1-Dichloroethane	75-34-3	1 U	1	5	0.98
10237	1,2-Dichloroethane	107-06-2	1 U	1	5	0.98
10237	1,1-Dichloroethene	75-35-4	1 U	1	5	0.98
10237	cis-1,2-Dichloroethene	156-59-2	1 U	1	5	0.98
10237	trans-1,2-Dichloroethene	156-60-5	1 U	1	5	0.98
10237	1,2-Dichloroethene (Total)	540-59-0	1 U	1	5	0.98
10237	Dichlorofluoromethane	75-43-4	2 U	2	5	0.98
10237	1,2-Dichloropropane	78-87-5	1 U	1	5	0.98
10237	1,1-Dichloropropene	563-58-6	1 U	1	5	0.98
10237	cis-1,3-Dichloropropene	10061-01-5	1 U	1	5	0.98
10237	Ethylbenzene	100-41-4	1 U	1	5	0.98
10237	Freon 113	76-13-1	2 U	2	11	0.98
10237	Freon 133a	75-88-7	2 U	2	5	0.98
10237	n-Hexane	110-54-3	1 U	1	5	0.98
10237	2-Hexanone	591-78-6	3 U	3	11	0.98
10237	Isobutyl Alcohol	78-83-1	110 U	110	270	0.98
10237	Isopropylbenzene	98-82-8	1 U	1	5	0.98
10237	p-Isopropyltoluene	99-87-6	1 U	1	5	0.98
10237	Methacrylonitrile	126-98-7	5 U	5	53	0.98
10237	Methyl Methacrylate	80-62-6	1 U	1	5	0.98

*=This limit was used in the evaluation of the final result

Sample Description: D16-BOR-11-(5.5-6.0) Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304788
ELLE Group #: 1872396
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 12:45

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Volatiles SW-846 8260B						
10237	Methyl Tertiary Butyl Ether	1634-04-4	0.5 U	0.5	5	0.98
10237	4-Methyl-2-pentanone	108-10-1	3 U	3	11	0.98
10237	Methylene Chloride	75-09-2	3 J	2	5	0.98
10237	Propionitrile	107-12-0	32 U	32	110	0.98
10237	n-Propylbenzene	103-65-1	1 U	1	5	0.98
10237	Styrene	100-42-5	1 U	1	5	0.98
10237	1,1,1,2-Tetrachloroethane	630-20-6	1 U	1	5	0.98
10237	1,1,2,2-Tetrachloroethane	79-34-5	1 U	1	5	0.98
10237	Tetrachloroethene	127-18-4	1 U	1	5	0.98
10237	Tetrahydrofuran	109-99-9	4 U	4	9	0.98
10237	Toluene	108-88-3	1 U	1	5	0.98
10237	1,1,1-Trichloroethane	71-55-6	1 U	1	5	0.98
10237	1,1,2-Trichloroethane	79-00-5	1 U	1	5	0.98
10237	Trichloroethene	79-01-6	1 U	1	5	0.98
10237	Trichlorofluoromethane	75-69-4	2 U	2	5	0.98
10237	1,2,4-Trimethylbenzene	95-63-6	1 U	1	5	0.98
10237	1,3,5-Trimethylbenzene	108-67-8	1 U	1	5	0.98
10237	Vinyl Chloride	75-01-4	1 U	1	5	0.98
10237	m+p-Xylene	179601-23-1	1 U	1	5	0.98
10237	o-Xylene	95-47-6	1 U	1	5	0.98
10237	Xylene (Total)	1330-20-7	1 U	1	5	0.98

The NJ DKQP analyte list requirement was not met for Method 8260B. The client specified list is reported.

GC/MS Volatiles	SW-846 8260FRN Modified	ug/kg	ug/kg	ug/kg		
13101	Chlorodifluoroethane	75-68-3	1 U	1	5	0.95
13101	Chlorodifluoromethane	75-45-6	2 U	2	5	0.95
13101	Chlorofluoromethane	593-70-4	1 U	1	5	0.95
13101	Chloropentafluoroethane	76-15-3	16 UZ	16	52	0.95
13101	1,1-Dichloro-1-fluoroethane	1717-00-6	1 U	1	5	0.95
13101	1,2-Dichloro-1-fluoroethane	430-57-9	1 U	1	5	0.95
13101	Dichlorotetrafluoroethane	76-14-2	2 U	2	5	0.95
13101	1,2-Dichlorotrifluoroethane	354-23-4	1 U	1	5	0.95
13101	Dichlorotrifluoroethane	306-83-2	1 U	1	5	0.95
13101	Fluoromethane	593-53-3	3 UZ	3	10	0.95
13101	Freon 113a	354-58-5	5 U	5	21	0.95
13101	1,1,2-Trifluoroethane	430-66-0	2 U	2	5	0.95
13101	Vinyl fluoride	75-02-5	6 U	6	21	0.95

Z= The response for a target analyte(s) in the continuing calibration verification standard is outside the QC acceptance limits. Since the response is high indicating increased sensitivity, and the target analyte(s) is not detected in the sample, the data is reported.

*=This limit was used in the evaluation of the final result

Sample Description: D16-BOR-11-(5.5-6.0) Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304788
ELLE Group #: 1872396
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 12:45

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
00884 Volatile Library Search - 15						
The results from the volatile library search are listed on the attached FORM 1 - VOA-TIC. The qualifiers appearing in the "Q" column are defined at the end of the report.						
GC/MS Semivolatiles	SW-846 8270C		ug/kg	ug/kg	ug/kg	
10723	Acenaphthene	83-32-9	46	4	18	1
10723	Acenaphthylene	208-96-8	17 J	4	18	1
10723	Acetophenone	98-86-2	18	U	18	1
10723	4-Aminobiphenyl	92-67-1	180	UZ	180	1
10723	Aniline	62-53-3	180	U	180	1
10723	Anthracene	120-12-7	27	4	18	1
10723	Benzidine	92-87-5	270	U	270	1
10723	Benzo(a)anthracene	56-55-3	4	U	4	1
10723	Benzo(a)pyrene	50-32-8	4	U	4	1
10723	Benzo(b)fluoranthene	205-99-2	4	U	4	1
10723	Benzo(g,h,i)perylene	191-24-2	4	U	4	1
10723	Benzo(k)fluoranthene	207-08-9	4	U	4	1
10723	1,1'-Biphenyl	92-52-4	18	U	18	1
10723	4-Bromophenyl-phenylether	101-55-3	18	U	18	1
10723	Butylbenzylphthalate	85-68-7	72	U	72	1
10723	Di-n-butylphthalate	84-74-2	72	U	72	1
10723	Carbazole	86-74-8	18	U	18	1
10723	4-Chloro-3-methylphenol	59-50-7	18	U	18	1
10723	4-Chloroaniline	106-47-8	36	U	36	1
10723	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	1
10723	bis(2-Chloroethyl)ether	111-44-4	18	U	18	1
10723	2-Chloronaphthalene	91-58-7	7	U	7	1
10723	2-Chlorophenol	95-57-8	18	U	18	1
10723	4-Chlorophenyl-phenylether	7005-72-3	18	U	18	1
10723	2,2'-oxybis(1-Chloropropane)	108-60-1	18	U	18	1
Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10723	Chrysene	218-01-9	4	U	4	1
10723	Dibenz(a,h)anthracene	53-70-3	4	U	4	1
10723	Dibenzofuran	132-64-9	29 J	18	36	1
10723	3,3'-Dichlorobenzidine	91-94-1	110	U	110	1
10723	2,4-Dichlorophenol	120-83-2	18	U	18	1
10723	Diethylphthalate	84-66-2	72	U	72	1
10723	2,4-Dimethylphenol	105-67-9	18	U	18	1
10723	Dimethylphthalate	131-11-3	72	U	72	1
10723	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	1
10723	2,4-Dinitrophenol	51-28-5	320	U	320	1,100

*=This limit was used in the evaluation of the final result

Sample Description: D16-BOR-11-(5.5-6.0) Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304788
ELLE Group #: 1872396
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 12:45

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	GC/MS Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
10723	2,4-Dinitrotoluene	121-14-2	72 U	72	180	1
10723	2,6-Dinitrotoluene	606-20-2	18 U	18	36	1
10723	1,4-Dioxane	123-91-1	110 U	110	360	1
10723	Diphenyl ether	101-84-8	18 U	18	36	1
10723	1,2-Diphenylhydrazine	122-66-7	18 U	18	36	1
10723	bis(2-Ethylhexyl)phthalate	117-81-7	72 U	72	180	1
10723	Fluoranthene	206-44-0	15 J	4	18	1
10723	Fluorene	86-73-7	41	4	18	1
10723	Hexachlorobenzene	118-74-1	4 U	4	18	1
10723	Hexachlorobutadiene	87-68-3	18 U	18	36	1
10723	Hexachlorocyclopentadiene	77-47-4	180 U	180	540	1
10723	Hexachloroethane	67-72-1	36 U	36	180	1
10723	Indeno(1,2,3-cd)pyrene	193-39-5	4 U	4	18	1
10723	Isophorone	78-59-1	18 U	18	36	1
10723	2-Methylnaphthalene	91-57-6	29	4	18	1
10723	2-Methylphenol	95-48-7	18 U	18	36	1
10723	4-Methylphenol	106-44-5	18 U	18	36	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
10723	Naphthalene	91-20-3	4 U	4	18	1
10723	1-Naphthylamine	134-32-7	180 U	180	540	1
10723	2-Naphthylamine	91-59-8	180 U	180	540	1
10723	2-Nitroaniline	88-74-4	18 U	18	36	1
10723	3-Nitroaniline	99-09-2	72 U	72	180	1
10723	4-Nitroaniline	100-01-6	72 U	72	180	1
10723	Nitrobenzene	98-95-3	18 U	18	36	1
10723	2-Nitrophenol	88-75-5	18 U	18	36	1
10723	4-Nitrophenol	100-02-7	180 U	180	540	1
10723	N-Nitrosodimethylamine	62-75-9	72 U	72	180	1
10723	N-Nitroso-di-n-propylamine	621-64-7	18 U	18	36	1
10723	N-Nitrosodiphenylamine	86-30-6	18 U	18	36	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
10723	Di-n-octylphthalate	117-84-0	72 U	72	180	1
10723	Parathion	56-38-2	180 U	180	540	1
10723	Pentachlorobenzene	608-93-5	18 U	18	36	1
10723	Pentachlorophenol	87-86-5	36 U	36	180	1
10723	Phenanthrene	85-01-8	91	4	18	1
10723	Phenol	108-95-2	18 U	18	36	1
10723	Pyrene	129-00-0	12 J	4	18	1
10723	2,3,4,6-Tetrachlorophenol	58-90-2	72 U	72	180	1

*=This limit was used in the evaluation of the final result

Sample Description: D16-BOR-11-(5.5-6.0) Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304788
ELLE Group #: 1872396
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 12:45

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	GC/MS Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
10723	o-Tolidine	95-53-4	220 U	220	720	1
10723	1,2,4-Trichlorobenzene	120-82-1	18 U	18	36	1
10723	2,4,5-Trichlorophenol	95-95-4	18 U	18	36	1
10723	2,4,6-Trichlorophenol	88-06-2	18 U	18	36	1

The project QA/QC requirements were not met.

Project defined QC acceptance limits are not met. All QC is compliant with the laboratory statistically generated limits.

The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. Since the recovery is high and the target analyte(s) was not detected in the sample, the data is reported.

Z=The response for a target analyte(s) in the initial calibration verification standard is outside the QC acceptance limits. Since the response is high indicating increased sensitivity, and the target analyte(s) is not detected in the sample, the data is reported.

00886 SVOA Library Search - 25

The results from the semivolatile library search are listed on the attached FORM 1 - SV-TIC. The qualifiers appearing in the "Q" column are defined at the end of the report.

Wet Chemistry	SW-846 9060A modified	mg/kg	mg/kg	mg/kg	
02079 Total Organic Carbon (TOC)	n.a.	189 J	109	328	1

Due to the nature of this sample matrix, the sample cup was filled to capacity with less than 1000 mg of sample being used. The lowered sample weight has resulted in a raised reporting limit.

Wet Chemistry	SM 2540 G-1997	%	%	%	
00111 Moisture	n.a.	8.5	0.50	0.50	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

Sample Comments

State of New Jersey Lab Certification No. PA011

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

*=This limit was used in the evaluation of the final result

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Sample Description: D16-BOR-11-(5.5-6.0) Soil
DE RIVER NAPL DELINEATION PHASE III**CRG-The Chemours Co. FC, LLC**
ELLE Sample #: SW 9304788
ELLE Group #: 1872396
Matrix: Soil**Project Name:** CWK - DE RIVER NAPL DELINEATION PHASE IIISubmittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 12:45**Laboratory Sample Analysis Record**

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	TCL Volatiles + Add'l Cmpds	SW-846 8260B	1	X173182AA	11/14/2017 16:49	Linda C Pape	0.98
13101	Freons	SW-846 8260FRN Modified	1	J173211AA	11/17/2017 14:33	Kevin A Sposito	0.95
08389	GC/MS - LL Encore Prep	SW-846 5035A	1	201731247803	11/08/2017 15:35	Rebecca Williams	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	2	201731247803	11/08/2017 15:36	Rebecca Williams	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	3	201731247803	11/08/2017 15:37	Rebecca Williams	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	4	201731247803	11/08/2017 15:38	Rebecca Williams	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035A	1	201731247803	11/08/2017 15:35	Rebecca Williams	n.a.
10723	TCL SVOAs + Add'l Cmpds	SW-846 8270C	1	17317SLE026	11/16/2017 18:12	Emily Gruver	1
10813	BNA Soil Microwave APP IX	SW-846 3546	1	17317SLE026	11/14/2017 02:50	Samantha M Metzgar	1
02079	Total Organic Carbon (TOC)	SW-846 9060A modified	1	17321667631A	11/17/2017 20:54	Drew M Gerhart	1
00111	Moisture	SM 2540 G-1997 %Moisture Calc	1	17313820011A	11/10/2017 09:29	Larry E Bevins	1

*=This limit was used in the evaluation of the final result

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1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS! _____ !
! DRN-9 !

Lab Name: Lancaster Laboratories Contract: _____
Lab Code: LANCAS Case No.: _____ SAS No.: _____ SDG No.: _____
Matrix: (soil/water) SOIL Lab Sample ID: 9304788
Sample wt/vol: 5.12 (g/mL) g Lab File ID: HP09193.i/17nov14a.b/xn14s45.d
Level: (low/med) LOW Date Received: 11/07/17
% Moisture: not dec. 8.5 Date Analyzed: 11/14/17
Column: (pack/cap) CAP Dilution Factor: 1.0
Number TICs found: 0 CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. VOCTIC	Total VOC TICs		0	U
2.				
3.				
4.				
5.				
6.				
7.				
8.				
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page 1 of 1

FORM I VOA-TIC

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

! _____ !
! DRN-9 !

Lab Name: Lancaster Laboratories Contract: _____
Lab Code: LANCAS Case No.: _____ SDG No.: _____
Matrix: (soil/water) SOIL Lab Sample ID: 9304788
Sample wt/vol: 30.33 (g/mL) g Lab File ID: pk0609.d
Level: (low/med) LOW Date Received: 11/07/17
% Moisture: 8.5 Decanted: (Y/N) Date Extracted: 11/14/17
Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/16/17
Injection Volume: 1 (uL) Dilution Factor: 1
GPC Cleanup: N pH: Extraction: Mic

CONCENTRATION UNITS:

Number TICs found: 9 (ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.625-86-5	Furan, 2,5-dimethyl-	1.866	170	JB
2.	Unknown Aldol Condensate	3.972	550	JB
3.559-74-0	Friedelan-3-one	13.354	260	J
4.	Unknown	14.242	150	J
5.	Unknown	14.818	260	J
6.	Unknown	14.918	190	J
7.	Unknown	14.948	180	J
8.	Unknown	15.112	260	J
9.	Unknown	15.154	160	J
10.				
11.SVOCTIC	Total SVOC TICs		2200	JB
12.				
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page 1 of 1

FORM I SV-1

Sample Description: D16-BOR-11-(7.0-7.5) Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304789
ELLE Group #: 1872396
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 12:50

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	GC/MS Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	
10237	Acetone	67-64-1	53	7	21	0.98
10237	Benzene	71-43-2	0.5 U	0.5	5	0.98
10237	Bromodichloromethane	75-27-4	1 U	1	5	0.98
10237	2-Butanone	78-93-3	4 U	4	11	0.98
10237	n-Butylbenzene	104-51-8	1 U	1	5	0.98
10237	sec-Butylbenzene	135-98-8	1 U	1	5	0.98
10237	tert-Butylbenzene	98-06-6	1 U	1	5	0.98
10237	Carbon Disulfide	75-15-0	1 U	1	5	0.98
10237	Carbon Tetrachloride	56-23-5	1 U	1	5	0.98
10237	Chlorobenzene	108-90-7	1 U	1	5	0.98
10237	Chloroethane	75-00-3	2 U	2	5	0.98
10237	Chloroform	67-66-3	1 U	1	5	0.98
10237	Chloromethane	74-87-3	2 U	2	5	0.98
10237	2-Chlorotoluene	95-49-8	1 U	1	5	0.98
10237	4-Chlorotoluene	106-43-4	1 U	1	5	0.98
10237	Chlorotrifluoroethene	79-38-9	2 U	2	5	0.98
10237	Dibromochloromethane	124-48-1	1 U	1	5	0.98
10237	1,2-Dibromoethane	106-93-4	1 U	1	5	0.98
10237	1,2-Dichlorobenzene	95-50-1	1 U	1	5	0.98
10237	1,3-Dichlorobenzene	541-73-1	1 U	1	5	0.98
10237	1,4-Dichlorobenzene	106-46-7	1 U	1	5	0.98
10237	Dichlorodifluoromethane	75-71-8	2 U	2	5	0.98
10237	1,1-Dichloroethane	75-34-3	1 U	1	5	0.98
10237	1,2-Dichloroethane	107-06-2	1 U	1	5	0.98
10237	1,1-Dichloroethene	75-35-4	1 U	1	5	0.98
10237	cis-1,2-Dichloroethene	156-59-2	1 U	1	5	0.98
10237	trans-1,2-Dichloroethene	156-60-5	1 U	1	5	0.98
10237	1,2-Dichloroethene (Total)	540-59-0	1 U	1	5	0.98
10237	Dichlorofluoromethane	75-43-4	2 U	2	5	0.98
10237	1,2-Dichloropropane	78-87-5	1 U	1	5	0.98
10237	1,1-Dichloropropene	563-58-6	1 U	1	5	0.98
10237	cis-1,3-Dichloropropene	10061-01-5	1 U	1	5	0.98
10237	Ethylbenzene	100-41-4	1 U	1	5	0.98
10237	Freon 113	76-13-1	2 U	2	11	0.98
10237	Freon 133a	75-88-7	2 U	2	5	0.98
10237	n-Hexane	110-54-3	1 U	1	5	0.98
10237	2-Hexanone	591-78-6	3 U	3	11	0.98
10237	Isobutyl Alcohol	78-83-1	110 U	110	270	0.98
10237	Isopropylbenzene	98-82-8	1 U	1	5	0.98
10237	p-Isopropyltoluene	99-87-6	1 U	1	5	0.98
10237	Methacrylonitrile	126-98-7	5 U	5	54	0.98
10237	Methyl Methacrylate	80-62-6	1 U	1	5	0.98

*=This limit was used in the evaluation of the final result

Sample Description: D16-BOR-11-(7.0-7.5) Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304789
ELLE Group #: 1872396
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 12:50

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Volatiles SW-846 8260B						
10237	Methyl Tertiary Butyl Ether	1634-04-4	0.5 U	0.5	5	0.98
10237	4-Methyl-2-pentanone	108-10-1	3 U	3	11	0.98
10237	Methylene Chloride	75-09-2	2 U	2	5	0.98
10237	Propionitrile	107-12-0	32 U	32	110	0.98
10237	n-Propylbenzene	103-65-1	1 U	1	5	0.98
10237	Styrene	100-42-5	1 U	1	5	0.98
10237	1,1,1,2-Tetrachloroethane	630-20-6	1 U	1	5	0.98
10237	1,1,2,2-Tetrachloroethane	79-34-5	1 U	1	5	0.98
10237	Tetrachloroethene	127-18-4	1 U	1	5	0.98
10237	Tetrahydrofuran	109-99-9	4 U	4	9	0.98
10237	Toluene	108-88-3	1 U	1	5	0.98
10237	1,1,1-Trichloroethane	71-55-6	1 U	1	5	0.98
10237	1,1,2-Trichloroethane	79-00-5	1 U	1	5	0.98
10237	Trichloroethene	79-01-6	1 U	1	5	0.98
10237	Trichlorofluoromethane	75-69-4	2 U	2	5	0.98
10237	1,2,4-Trimethylbenzene	95-63-6	1 U	1	5	0.98
10237	1,3,5-Trimethylbenzene	108-67-8	1 U	1	5	0.98
10237	Vinyl Chloride	75-01-4	1 U	1	5	0.98
10237	m+p-Xylene	179601-23-1	1 U	1	5	0.98
10237	o-Xylene	95-47-6	1 U	1	5	0.98
10237	Xylene (Total)	1330-20-7	1 U	1	5	0.98

The NJ DKQP analyte list requirement was not met for Method 8260B. The client specified list is reported.

GC/MS Volatiles	SW-846 8260FRN Modified	ug/kg	ug/kg	ug/kg		
13101	Chlorodifluoroethane	75-68-3	1 U	1	6	1.01
13101	Chlorodifluoromethane	75-45-6	2 U	2	6	1.01
13101	Chlorofluoromethane	593-70-4	1 U	1	6	1.01
13101	Chloropentafluoroethane	76-15-3	17 UZ	17	55	1.01
13101	1,1-Dichloro-1-fluoroethane	1717-00-6	1 U	1	6	1.01
13101	1,2-Dichloro-1-fluoroethane	430-57-9	1 U	1	6	1.01
13101	Dichlorotetrafluoroethane	76-14-2	2 U	2	6	1.01
13101	1,2-Dichlorotrifluoroethane	354-23-4	1 U	1	6	1.01
13101	Dichlorotrifluoroethane	306-83-2	1 U	1	6	1.01
13101	Fluoromethane	593-53-3	3 UZ	3	11	1.01
13101	Freon 113a	354-58-5	6 U	6	22	1.01
13101	1,1,2-Trifluoroethane	430-66-0	2 U	2	6	1.01
13101	Vinyl fluoride	75-02-5	7 U	7	22	1.01

Z= The response for a target analyte(s) in the continuing calibration verification standard is outside the QC acceptance limits. Since the response is high indicating increased sensitivity, and the target analyte(s) is not detected in the sample, the data is reported.

*=This limit was used in the evaluation of the final result

Sample Description: D16-BOR-11-(7.0-7.5) Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304789
ELLE Group #: 1872396
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 12:50

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
00884 Volatile Library Search - 15						
The results from the volatile library search are listed on the attached FORM 1 - VOA-TIC. The qualifiers appearing in the "Q" column are defined at the end of the report.						
GC/MS Semivolatiles	SW-846 8270C		ug/kg	ug/kg	ug/kg	
10723	Acenaphthene	83-32-9	34	4	18	1
10723	Acenaphthylene	208-96-8	17 J	4	18	1
10723	Acetophenone	98-86-2	18	U	18	1
10723	4-Aminobiphenyl	92-67-1	180	UZ	180	1
10723	Aniline	62-53-3	180	U	180	1
10723	Anthracene	120-12-7	19	4	18	1
10723	Benzidine	92-87-5	270	U	270	1
10723	Benzo(a)anthracene	56-55-3	4	U	4	1
10723	Benzo(a)pyrene	50-32-8	4	U	4	1
10723	Benzo(b)fluoranthene	205-99-2	4	U	4	1
10723	Benzo(g,h,i)perylene	191-24-2	4	U	4	1
10723	Benzo(k)fluoranthene	207-08-9	4	U	4	1
10723	1,1'-Biphenyl	92-52-4	18	U	18	1
10723	4-Bromophenyl-phenylether	101-55-3	18	U	18	1
10723	Butylbenzylphthalate	85-68-7	72	U	72	1
10723	Di-n-butylphthalate	84-74-2	72	U	72	1
10723	Carbazole	86-74-8	18	U	18	1
10723	4-Chloro-3-methylphenol	59-50-7	18	U	18	1
10723	4-Chloroaniline	106-47-8	36	U	36	1
10723	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	1
10723	bis(2-Chloroethyl)ether	111-44-4	18	U	18	1
10723	2-Chloronaphthalene	91-58-7	7	U	7	1
10723	2-Chlorophenol	95-57-8	18	U	18	1
10723	4-Chlorophenyl-phenylether	7005-72-3	18	U	18	1
10723	2,2'-oxybis(1-Chloropropane)	108-60-1	18	U	18	1
Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10723	Chrysene	218-01-9	4	U	4	1
10723	Dibenz(a,h)anthracene	53-70-3	4	U	4	1
10723	Dibenzofuran	132-64-9	26 J	18	36	1
10723	3,3'-Dichlorobenzidine	91-94-1	110	U	110	1
10723	2,4-Dichlorophenol	120-83-2	18	U	18	1
10723	Diethylphthalate	84-66-2	72	U	72	1
10723	2,4-Dimethylphenol	105-67-9	18	U	18	1
10723	Dimethylphthalate	131-11-3	72	U	72	1
10723	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	1
10723	2,4-Dinitrophenol	51-28-5	320	U	320	1,100

*=This limit was used in the evaluation of the final result

Sample Description: D16-BOR-11-(7.0-7.5) Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304789
ELLE Group #: 1872396
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 12:50

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	GC/MS Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
10723	2,4-Dinitrotoluene	121-14-2	72 U	72	180	1
10723	2,6-Dinitrotoluene	606-20-2	18 U	18	36	1
10723	1,4-Dioxane	123-91-1	110 U	110	360	1
10723	Diphenyl ether	101-84-8	18 U	18	36	1
10723	1,2-Diphenylhydrazine	122-66-7	18 U	18	36	1
10723	bis(2-Ethylhexyl)phthalate	117-81-7	72 U	72	180	1
10723	Fluoranthene	206-44-0	18 J	4	18	1
10723	Fluorene	86-73-7	37	4	18	1
10723	Hexachlorobenzene	118-74-1	4 U	4	18	1
10723	Hexachlorobutadiene	87-68-3	18 U	18	36	1
10723	Hexachlorocyclopentadiene	77-47-4	180 U	180	540	1
10723	Hexachloroethane	67-72-1	36 U	36	180	1
10723	Indeno(1,2,3-cd)pyrene	193-39-5	4 U	4	18	1
10723	Isophorone	78-59-1	18 U	18	36	1
10723	2-Methylnaphthalene	91-57-6	18 J	4	18	1
10723	2-Methylphenol	95-48-7	18 U	18	36	1
10723	4-Methylphenol	106-44-5	18 U	18	36	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
10723	Naphthalene	91-20-3	4 J	4	18	1
10723	1-Naphthylamine	134-32-7	180 U	180	540	1
10723	2-Naphthylamine	91-59-8	180 U	180	540	1
10723	2-Nitroaniline	88-74-4	18 U	18	36	1
10723	3-Nitroaniline	99-09-2	72 U	72	180	1
10723	4-Nitroaniline	100-01-6	72 U	72	180	1
10723	Nitrobenzene	98-95-3	18 U	18	36	1
10723	2-Nitrophenol	88-75-5	18 U	18	36	1
10723	4-Nitrophenol	100-02-7	180 U	180	540	1
10723	N-Nitrosodimethylamine	62-75-9	72 U	72	180	1
10723	N-Nitroso-di-n-propylamine	621-64-7	18 U	18	36	1
10723	N-Nitrosodiphenylamine	86-30-6	18 U	18	36	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
10723	Di-n-octylphthalate	117-84-0	72 U	72	180	1
10723	Parathion	56-38-2	180 U	180	540	1
10723	Pentachlorobenzene	608-93-5	18 U	18	36	1
10723	Pentachlorophenol	87-86-5	36 U	36	180	1
10723	Phenanthrene	85-01-8	90	4	18	1
10723	Phenol	108-95-2	18 U	18	36	1
10723	Pyrene	129-00-0	11 J	4	18	1
10723	2,3,4,6-Tetrachlorophenol	58-90-2	72 U	72	180	1

*=This limit was used in the evaluation of the final result

Sample Description: D16-BOR-11-(7.0-7.5) Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304789
ELLE Group #: 1872396
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 12:50

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	GC/MS Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
10723	o-Tolidine	95-53-4	220 U	220	720	1
10723	1,2,4-Trichlorobenzene	120-82-1	18 U	18	36	1
10723	2,4,5-Trichlorophenol	95-95-4	18 U	18	36	1
10723	2,4,6-Trichlorophenol	88-06-2	18 U	18	36	1

The project QA/QC requirements were not met.

Project defined QC acceptance limits are not met. All QC is compliant with the laboratory statistically generated limits.

The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. Since the recovery is high and the target analyte(s) was not detected in the sample, the data is reported.

Z=The response for a target analyte(s) in the initial calibration verification standard is outside the QC acceptance limits. Since the response is high indicating increased sensitivity, and the target analyte(s) is not detected in the sample, the data is reported.

00886 SVOA Library Search - 25

The results from the semivolatile library search are listed on the attached FORM 1 - SV-TIC. The qualifiers appearing in the "Q" column are defined at the end of the report.

Wet Chemistry	SW-846 9060A modified	mg/kg	mg/kg	mg/kg	
02079 Total Organic Carbon (TOC)	n.a.	222 J	112	335	1
Wet Chemistry	SM 2540 G-1997	%	%	%	
00111 Moisture	%Moisture Calc	n.a.	8.6	0.50	0.50

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

Sample Comments

State of New Jersey Lab Certification No. PA011

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	TCL Volatiles + Add'l Cmpds	SW-846 8260B	1	X173182AA	11/14/2017 17:12	Linda C Pape	0.98

*=This limit was used in the evaluation of the final result

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Sample Description: D16-BOR-11-(7.0-7.5) Soil
DE RIVER NAPL DELINEATION PHASE III**CRG-The Chemours Co. FC, LLC**
ELLE Sample #: SW 9304789
ELLE Group #: 1872396
Matrix: Soil**Project Name:** CWK - DE RIVER NAPL DELINEATION PHASE IIISubmittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 12:50**Laboratory Sample Analysis Record**

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
13101	Freons	SW-846 8260FRN Modified	1	J173211AA	11/17/2017 15:03	Kevin A Sposito	1.01
08389	GC/MS - LL Encore Prep	SW-846 5035A	1	201731247803	11/08/2017 15:42	Rebecca Williams	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	2	201731247803	11/08/2017 15:43	Rebecca Williams	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	3	201731247803	11/08/2017 15:44	Rebecca Williams	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	4	201731247803	11/08/2017 15:45	Rebecca Williams	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035A	1	201731247803	11/08/2017 15:41	Rebecca Williams	n.a.
10723	TCL SVOAs + Add'l Cmpds	SW-846 8270C	1	17317SLE026	11/16/2017 18:36	Emily Gruver	1
10813	BNA Soil Microwave APP IX	SW-846 3546	1	17317SLE026	11/14/2017 02:50	Samantha M Metzgar	1
02079	Total Organic Carbon (TOC)	SW-846 9060A modified	1	17325667631A	11/21/2017 21:37	Drew M Gerhart	1
00111	Moisture	SM 2540 G-1997 %Moisture Calc	1	17313820011A	11/10/2017 09:29	Larry E Bevins	1

*=This limit was used in the evaluation of the final result

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1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

! _____ !
! DR-10 !

Lab Name: Lancaster Laboratories Contract: _____
Lab Code: LANCAS Case No.: _____ SAS No.: _____ SDG No.: _____
Matrix: (soil/water) SOIL Lab Sample ID: 9304789
Sample wt/vol: 5.11 (g/mL) g Lab File ID: HP09193.i/17nov14a.b/xn14s46.d
Level: (low/med) LOW Date Received: 11/07/17
% Moisture: not dec. 8.6 Date Analyzed: 11/14/17
Column: (pack/cap) CAP Dilution Factor: 1.0
Number TICs found: 0 CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. VOCTIC	Total VOC TICs		0	U
2.				
3.				
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page 1 of 1

FORM I VOA-TIC

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

! _____ !
! DR-10 !

Lab Name: Lancaster Laboratories Contract: _____
Lab Code: LANCAS Case No.: _____ SAS No.: _____ SDG No.: _____
Matrix: (soil/water) SOIL Lab Sample ID: 9304789
Sample wt/vol: 30.31(g/mL) g Lab File ID: pk0610.d
Level: (low/med) LOW Date Received: 11/07/17
% Moisture: 8.6 Decanted: (Y/N) Date Extracted: 11/14/17
Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/16/17
Injection Volume: 1 (uL) Dilution Factor: 1
GPC Cleanup: N pH: Extraction: Mic

CONCENTRATION UNITS:

Number TICs found: 8 (ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.625-86-5	Furan, 2,5-dimethyl-	1.866	220	JB
2.	Unknown Aldol Condensate	3.972	560	JB
3.	Unknown	14.812	160	J
4.	Unknown	14.971	230	J
5.	Unknown	15.124	150	J
6.	Unknown	15.218	250	J
7.	Unknown	15.536	170	J
8.	Unknown	15.848	160	J
9.				
10. SVOCTIC	Total SVOC TICs		1900	JB
11.				
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page 1 of 1

FORM I SV-1

Sample Description: D16-BOR-11-(10.0-10.3) Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304790
ELLE Group #: 1872396
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 13:10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	GC/MS Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	
10237	Acetone	67-64-1	26	8	22	1.01
10237	Benzene	71-43-2	0.6 U	0.6	6	1.01
10237	Bromodichloromethane	75-27-4	1 U	1	6	1.01
10237	2-Butanone	78-93-3	4 U	4	11	1.01
10237	n-Butylbenzene	104-51-8	1 U	1	6	1.01
10237	sec-Butylbenzene	135-98-8	1 U	1	6	1.01
10237	tert-Butylbenzene	98-06-6	1 U	1	6	1.01
10237	Carbon Disulfide	75-15-0	1 U	1	6	1.01
10237	Carbon Tetrachloride	56-23-5	1 U	1	6	1.01
10237	Chlorobenzene	108-90-7	1 U	1	6	1.01
10237	Chloroethane	75-00-3	2 U	2	6	1.01
10237	Chloroform	67-66-3	1 U	1	6	1.01
10237	Chloromethane	74-87-3	2 U	2	6	1.01
10237	2-Chlorotoluene	95-49-8	1 U	1	6	1.01
10237	4-Chlorotoluene	106-43-4	1 U	1	6	1.01
10237	Chlorotrifluoroethene	79-38-9	2 U	2	6	1.01
10237	Dibromochloromethane	124-48-1	1 U	1	6	1.01
10237	1,2-Dibromoethane	106-93-4	1 U	1	6	1.01
10237	1,2-Dichlorobenzene	95-50-1	1 U	1	6	1.01
10237	1,3-Dichlorobenzene	541-73-1	1 U	1	6	1.01
10237	1,4-Dichlorobenzene	106-46-7	1 U	1	6	1.01
10237	Dichlorodifluoromethane	75-71-8	2 U	2	6	1.01
10237	1,1-Dichloroethane	75-34-3	1 U	1	6	1.01
10237	1,2-Dichloroethane	107-06-2	1 U	1	6	1.01
10237	1,1-Dichloroethene	75-35-4	1 U	1	6	1.01
10237	cis-1,2-Dichloroethene	156-59-2	1 U	1	6	1.01
10237	trans-1,2-Dichloroethene	156-60-5	1 U	1	6	1.01
10237	1,2-Dichloroethene (Total)	540-59-0	1 U	1	6	1.01
10237	Dichlorofluoromethane	75-43-4	2 U	2	6	1.01
10237	1,2-Dichloropropane	78-87-5	1 U	1	6	1.01
10237	1,1-Dichloropropene	563-58-6	1 U	1	6	1.01
10237	cis-1,3-Dichloropropene	10061-01-5	1 U	1	6	1.01
10237	Ethylbenzene	100-41-4	1 U	1	6	1.01
10237	Freon 113	76-13-1	2 U	2	11	1.01
10237	Freon 133a	75-88-7	2 U	2	6	1.01
10237	n-Hexane	110-54-3	1 U	1	6	1.01
10237	2-Hexanone	591-78-6	3 U	3	11	1.01
10237	Isobutyl Alcohol	78-83-1	110 U	110	280	1.01
10237	Isopropylbenzene	98-82-8	1 U	1	6	1.01
10237	p-Isopropyltoluene	99-87-6	1 U	1	6	1.01
10237	Methacrylonitrile	126-98-7	6 U	6	55	1.01
10237	Methyl Methacrylate	80-62-6	1 U	1	6	1.01

*=This limit was used in the evaluation of the final result

Sample Description: D16-BOR-11-(10.0-10.3) Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304790
ELLE Group #: 1872396
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 13:10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Volatiles SW-846 8260B						
10237	Methyl Tertiary Butyl Ether	1634-04-4	0.6 U	0.6	6	1.01
10237	4-Methyl-2-pentanone	108-10-1	3 U	3	11	1.01
10237	Methylene Chloride	75-09-2	2 U	2	6	1.01
10237	Propionitrile	107-12-0	33 U	33	110	1.01
10237	n-Propylbenzene	103-65-1	1 U	1	6	1.01
10237	Styrene	100-42-5	1 U	1	6	1.01
10237	1,1,1,2-Tetrachloroethane	630-20-6	1 U	1	6	1.01
10237	1,1,2,2-Tetrachloroethane	79-34-5	1 U	1	6	1.01
10237	Tetrachloroethene	127-18-4	1 U	1	6	1.01
10237	Tetrahydrofuran	109-99-9	4 U	4	9	1.01
10237	Toluene	108-88-3	1 U	1	6	1.01
10237	1,1,1-Trichloroethane	71-55-6	1 U	1	6	1.01
10237	1,1,2-Trichloroethane	79-00-5	1 U	1	6	1.01
10237	Trichloroethene	79-01-6	1 U	1	6	1.01
10237	Trichlorofluoromethane	75-69-4	2 U	2	6	1.01
10237	1,2,4-Trimethylbenzene	95-63-6	1 U	1	6	1.01
10237	1,3,5-Trimethylbenzene	108-67-8	1 U	1	6	1.01
10237	Vinyl Chloride	75-01-4	1 U	1	6	1.01
10237	m+p-Xylene	179601-23-1	1 U	1	6	1.01
10237	o-Xylene	95-47-6	1 U	1	6	1.01
10237	Xylene (Total)	1330-20-7	1 U	1	6	1.01

The NJ DKQP analyte list requirement was not met for Method 8260B. The client specified list is reported.

GC/MS Volatiles	SW-846 8260FRN Modified	ug/kg	ug/kg	ug/kg		
13101	Chlorodifluoroethane	75-68-3	1 U	1	6	1.07
13101	Chlorodifluoromethane	75-45-6	2 U	2	6	1.07
13101	Chlorofluoromethane	593-70-4	1 U	1	6	1.07
13101	Chloropentafluoroethane	76-15-3	17 UZ	17	58	1.07
13101	1,1-Dichloro-1-fluoroethane	1717-00-6	1 U	1	6	1.07
13101	1,2-Dichloro-1-fluoroethane	430-57-9	1 U	1	6	1.07
13101	Dichlorotetrafluoroethane	76-14-2	2 U	2	6	1.07
13101	1,2-Dichlorotrifluoroethane	354-23-4	1 U	1	6	1.07
13101	Dichlorotrifluoroethane	306-83-2	1 U	1	6	1.07
13101	Fluoromethane	593-53-3	3 UZ	3	12	1.07
13101	Freon 113a	354-58-5	6 U	6	23	1.07
13101	1,1,2-Trifluoroethane	430-66-0	2 U	2	6	1.07
13101	Vinyl fluoride	75-02-5	7 U	7	23	1.07

Z= The response for a target analyte(s) in the continuing calibration verification standard is outside the QC acceptance limits. Since the response is high indicating increased sensitivity, and the target analyte(s) is not detected in the sample, the data is reported.

*=This limit was used in the evaluation of the final result

Sample Description: D16-BOR-11-(10.0-10.3) Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304790
ELLE Group #: 1872396
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 13:10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
00884 Volatile Library Search - 15						
The results from the volatile library search are listed on the attached FORM 1 - VOA-TIC. The qualifiers appearing in the "Q" column are defined at the end of the report.						
GC/MS Semivolatiles	SW-846 8270C		ug/kg	ug/kg	ug/kg	
10723	Acenaphthene	83-32-9	25	4	18	1
10723	Acenaphthylene	208-96-8	14 J	4	18	1
10723	Acetophenone	98-86-2	18 U	18	36	1
10723	4-Aminobiphenyl	92-67-1	180 UZ	180	540	1
10723	Aniline	62-53-3	180 U	180	540	1
10723	Anthracene	120-12-7	19	4	18	1
10723	Benzidine	92-87-5	270 U	270	540	1
10723	Benzo(a)anthracene	56-55-3	4 U	4	18	1
10723	Benzo(a)pyrene	50-32-8	4 U	4	18	1
10723	Benzo(b)fluoranthene	205-99-2	4 U	4	18	1
10723	Benzo(g,h,i)perylene	191-24-2	4 U	4	18	1
10723	Benzo(k)fluoranthene	207-08-9	4 U	4	18	1
10723	1,1'-Biphenyl	92-52-4	18 U	18	36	1
10723	4-Bromophenyl-phenylether	101-55-3	18 U	18	36	1
10723	Butylbenzylphthalate	85-68-7	72 U	72	180	1
10723	Di-n-butylphthalate	84-74-2	72 U	72	180	1
10723	Carbazole	86-74-8	18 U	18	36	1
10723	4-Chloro-3-methylphenol	59-50-7	18 U	18	36	1
10723	4-Chloroaniline	106-47-8	36 U	36	72	1
10723	bis(2-Chloroethoxy)methane	111-91-1	18 U	18	36	1
10723	bis(2-Chloroethyl)ether	111-44-4	18 U	18	36	1
10723	2-Chloronaphthalene	91-58-7	7 U	7	36	1
10723	2-Chlorophenol	95-57-8	18 U	18	36	1
10723	4-Chlorophenyl-phenylether	7005-72-3	18 U	18	36	1
10723	2,2'-oxybis(1-Chloropropane)	108-60-1	18 U	18	36	1
Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10723	Chrysene	218-01-9	4 U	4	18	1
10723	Dibenz(a,h)anthracene	53-70-3	4 U	4	18	1
10723	Dibenzofuran	132-64-9	18 U	18	36	1
10723	3,3'-Dichlorobenzidine	91-94-1	110 U	110	360	1
10723	2,4-Dichlorophenol	120-83-2	18 U	18	36	1
10723	Diethylphthalate	84-66-2	72 U	72	180	1
10723	2,4-Dimethylphenol	105-67-9	18 U	18	36	1
10723	Dimethylphthalate	131-11-3	72 U	72	180	1
10723	4,6-Dinitro-2-methylphenol	534-52-1	180 U	180	540	1
10723	2,4-Dinitrophenol	51-28-5	320 U	320	1,100	1

*=This limit was used in the evaluation of the final result

Sample Description: D16-BOR-11-(10.0-10.3) Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304790
ELLE Group #: 1872396
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 13:10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	GC/MS Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
10723	2,4-Dinitrotoluene	121-14-2	72 U	72	180	1
10723	2,6-Dinitrotoluene	606-20-2	18 U	18	36	1
10723	1,4-Dioxane	123-91-1	110 U	110	360	1
10723	Diphenyl ether	101-84-8	18 U	18	36	1
10723	1,2-Diphenylhydrazine	122-66-7	18 U	18	36	1
10723	bis(2-Ethylhexyl)phthalate	117-81-7	72 U	72	180	1
10723	Fluoranthene	206-44-0	16 J	4	18	1
10723	Fluorene	86-73-7	30	4	18	1
10723	Hexachlorobenzene	118-74-1	4 U	4	18	1
10723	Hexachlorobutadiene	87-68-3	18 U	18	36	1
10723	Hexachlorocyclopentadiene	77-47-4	180 U	180	540	1
10723	Hexachloroethane	67-72-1	36 U	36	180	1
10723	Indeno(1,2,3-cd)pyrene	193-39-5	4 U	4	18	1
10723	Isophorone	78-59-1	18 U	18	36	1
10723	2-Methylnaphthalene	91-57-6	11 J	4	18	1
10723	2-Methylphenol	95-48-7	18 U	18	36	1
10723	4-Methylphenol	106-44-5	18 U	18	36	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
10723	Naphthalene	91-20-3	4 U	4	18	1
10723	1-Naphthylamine	134-32-7	180 U	180	540	1
10723	2-Naphthylamine	91-59-8	180 U	180	540	1
10723	2-Nitroaniline	88-74-4	18 U	18	36	1
10723	3-Nitroaniline	99-09-2	72 U	72	180	1
10723	4-Nitroaniline	100-01-6	72 U	72	180	1
10723	Nitrobenzene	98-95-3	18 U	18	36	1
10723	2-Nitrophenol	88-75-5	18 U	18	36	1
10723	4-Nitrophenol	100-02-7	180 U	180	540	1
10723	N-Nitrosodimethylamine	62-75-9	72 U	72	180	1
10723	N-Nitroso-di-n-propylamine	621-64-7	18 U	18	36	1
10723	N-Nitrosodiphenylamine	86-30-6	18 U	18	36	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
10723	Di-n-octylphthalate	117-84-0	72 U	72	180	1
10723	Parathion	56-38-2	180 U	180	540	1
10723	Pentachlorobenzene	608-93-5	18 U	18	36	1
10723	Pentachlorophenol	87-86-5	36 U	36	180	1
10723	Phenanthrene	85-01-8	82	4	18	1
10723	Phenol	108-95-2	18 U	18	36	1
10723	Pyrene	129-00-0	13 J	4	18	1
10723	2,3,4,6-Tetrachlorophenol	58-90-2	72 U	72	180	1

*=This limit was used in the evaluation of the final result

Sample Description: D16-BOR-11-(10.0-10.3) Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304790
ELLE Group #: 1872396
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 13:10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	GC/MS Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
10723	o-Tolidine	95-53-4	220 U	220	720	1
10723	1,2,4-Trichlorobenzene	120-82-1	18 U	18	36	1
10723	2,4,5-Trichlorophenol	95-95-4	18 U	18	36	1
10723	2,4,6-Trichlorophenol	88-06-2	18 U	18	36	1

The project QA/QC requirements were not met.

Project defined QC acceptance limits are not met. All QC is compliant with the laboratory statistically generated limits.

The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. Since the recovery is high and the target analyte(s) was not detected in the sample, the data is reported.

Z=The response for a target analyte(s) in the initial calibration verification standard is outside the QC acceptance limits. Since the response is high indicating increased sensitivity, and the target analyte(s) is not detected in the sample, the data is reported.

00886 SVOA Library Search - 25

The results from the semivolatile library search are listed on the attached FORM 1 - SV-TIC. The qualifiers appearing in the "Q" column are defined at the end of the report.

Wet Chemistry	SW-846 9060A modified	mg/kg	mg/kg	mg/kg	
02079 Total Organic Carbon (TOC)	n.a.	342	112	336	1
Wet Chemistry	SM 2540 G-1997	%	%	%	
00111 Moisture	%Moisture Calc	n.a.	8.0	0.50	0.50

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

Sample Comments

State of New Jersey Lab Certification No. PA011

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	TCL Volatiles + Add'l Cmpds	SW-846 8260B	1	X173182AA	11/14/2017 17:35	Linda C Pape	1.01

*=This limit was used in the evaluation of the final result

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Sample Description: D16-BOR-11-(10.0-10.3) Soil
DE RIVER NAPL DELINEATION PHASE III**CRG-The Chemours Co. FC, LLC**
ELLE Sample #: SW 9304790
ELLE Group #: 1872396
Matrix: Soil**Project Name:** CWK - DE RIVER NAPL DELINEATION PHASE IIISubmittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 13:10**Laboratory Sample Analysis Record**

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
13101	Freons	SW-846 8260FRN Modified	1	J173211AA	11/17/2017 15:33	Kevin A Sposito	1.07
08389	GC/MS - LL Encore Prep	SW-846 5035A	1	201731247803	11/08/2017 15:49	Rebecca Williams	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	2	201731247803	11/08/2017 15:50	Rebecca Williams	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	3	201731247803	11/08/2017 15:51	Rebecca Williams	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	4	201731247803	11/08/2017 15:52	Rebecca Williams	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035A	1	201731247803	11/08/2017 15:48	Rebecca Williams	n.a.
10723	TCL SVOAs + Add'l Cmpds	SW-846 8270C	1	17317SLE026	11/16/2017 19:00	Emily Gruver	1
10813	BNA Soil Microwave APP IX	SW-846 3546	1	17317SLE026	11/14/2017 02:50	Samantha M Metzgar	1
02079	Total Organic Carbon (TOC)	SW-846 9060A modified	1	17325667631B	11/22/2017 00:38	Drew M Gerhart	1
00111	Moisture	SM 2540 G-1997 %Moisture Calc	1	17313820011A	11/10/2017 09:29	Larry E Bevins	1

*=This limit was used in the evaluation of the final result

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1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

! _____ !
! DR-11 !

Lab Name: Lancaster Laboratories Contract: _____
Lab Code: LANCAS Case No.: _____ SAS No.: _____ SDG No.: _____
Matrix: (soil/water) SOIL Lab Sample ID: 9304790
Sample wt/vol: 4.93 (g/mL) g Lab File ID: HP09193.i/17nov14a.b/xn14s47.d
Level: (low/med) LOW Date Received: 11/07/17
% Moisture: not dec. 8 Date Analyzed: 11/14/17
Column: (pack/cap) CAP Dilution Factor: 1.0
Number TICs found: 1 CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 541-05-9	Cyclotrisiloxane, hexamethyl	10.14	6	J
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3. VOCTIC	Total VOC TICs		6	J
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page 1 of 1

FORM I VOA-TIC

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

! _____ !
! DR-11 !

Lab Name: Lancaster Laboratories Contract: _____
Lab Code: LANCAS Case No.: _____ SAS No.: _____ SDG No.: _____
Matrix: (soil/water) SOIL Lab Sample ID: 9304790
Sample wt/vol: 30.17(g/mL) g Lab File ID: pk0611.d
Level: (low/med) LOW Date Received: 11/07/17
% Moisture: 8 Decanted: (Y/N) Date Extracted: 11/14/17
Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/16/17
Injection Volume: 1 (uL) Dilution Factor: 1
GPC Cleanup: N pH: Extraction: Mic

CONCENTRATION UNITS:

Number TICs found: 2

(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.625-86-5	Furan, 2,5-dimethyl-	1.866	150	JB
2.	Unknown Aldol Condensate	3.972	540	JB
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4.SVOCTIC	Total SVOC TICs		690	JB
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page 1 of 1

FORM I SV-1

Sample Description: D16-BOR-11-(10.3-10.5) Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304791
ELLE Group #: 1872396
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 13:15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	GC/MS Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	
10237	Acetone	67-64-1	26	8	23	0.94
10237	Benzene	71-43-2	15	0.6	6	0.94
10237	Bromodichloromethane	75-27-4	1 U	1	6	0.94
10237	2-Butanone	78-93-3	5 U	5	11	0.94
10237	n-Butylbenzene	104-51-8	1 U	1	6	0.94
10237	sec-Butylbenzene	135-98-8	1 U	1	6	0.94
10237	tert-Butylbenzene	98-06-6	1 U	1	6	0.94
10237	Carbon Disulfide	75-15-0	1 U	1	6	0.94
10237	Carbon Tetrachloride	56-23-5	1 J	1	6	0.94
10237	Chlorobenzene	108-90-7	80	1	6	0.94
10237	Chloroethane	75-00-3	2 U	2	6	0.94
10237	Chloroform	67-66-3	4 J	1	6	0.94
10237	Chloromethane	74-87-3	2 U	2	6	0.94
10237	2-Chlorotoluene	95-49-8	1 U	1	6	0.94
10237	4-Chlorotoluene	106-43-4	1 U	1	6	0.94
10237	Chlorotrifluoroethene	79-38-9	2 U	2	6	0.94
10237	Dibromochloromethane	124-48-1	1 U	1	6	0.94
10237	1,2-Dibromoethane	106-93-4	1 U	1	6	0.94
10237	1,2-Dichlorobenzene	95-50-1	2 J	1	6	0.94
10237	1,3-Dichlorobenzene	541-73-1	1 U	1	6	0.94
10237	1,4-Dichlorobenzene	106-46-7	2 J	1	6	0.94
10237	Dichlorodifluoromethane	75-71-8	2 U	2	6	0.94
10237	1,1-Dichloroethane	75-34-3	1 U	1	6	0.94
10237	1,2-Dichloroethane	107-06-2	1 U	1	6	0.94
10237	1,1-Dichloroethene	75-35-4	1 U	1	6	0.94
10237	cis-1,2-Dichloroethene	156-59-2	1 U	1	6	0.94
10237	trans-1,2-Dichloroethene	156-60-5	1 U	1	6	0.94
10237	1,2-Dichloroethene (Total)	540-59-0	1 U	1	6	0.94
10237	Dichlorofluoromethane	75-43-4	2 J	2	6	0.94
10237	1,2-Dichloropropane	78-87-5	1 U	1	6	0.94
10237	1,1-Dichloropropene	563-58-6	1 U	1	6	0.94
10237	cis-1,3-Dichloropropene	10061-01-5	1 U	1	6	0.94
10237	Ethylbenzene	100-41-4	1 U	1	6	0.94
10237	Freon 113	76-13-1	34	2	11	0.94
10237	Freon 133a	75-88-7	2 U	2	6	0.94
10237	n-Hexane	110-54-3	1 U	1	6	0.94
10237	2-Hexanone	591-78-6	3 U	3	11	0.94
10237	Isobutyl Alcohol	78-83-1	110 U	110	290	0.94
10237	Isopropylbenzene	98-82-8	1 U	1	6	0.94
10237	p-Isopropyltoluene	99-87-6	1 U	1	6	0.94
10237	Methacrylonitrile	126-98-7	6 U	6	57	0.94
10237	Methyl Methacrylate	80-62-6	1 U	1	6	0.94

*=This limit was used in the evaluation of the final result

Sample Description: D16-BOR-11-(10.3-10.5) Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304791
ELLE Group #: 1872396
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 13:15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Volatiles SW-846 8260B						
10237	Methyl Tertiary Butyl Ether	1634-04-4	0.7 J	0.6	6	0.94
10237	4-Methyl-2-pentanone	108-10-1	3 U	3	11	0.94
10237	Methylene Chloride	75-09-2	2 U	2	6	0.94
10237	Propionitrile	107-12-0	34 U	34	110	0.94
10237	n-Propylbenzene	103-65-1	1 U	1	6	0.94
10237	Styrene	100-42-5	1 U	1	6	0.94
10237	1,1,1,2-Tetrachloroethane	630-20-6	1 U	1	6	0.94
10237	1,1,2,2-Tetrachloroethane	79-34-5	1 U	1	6	0.94
10237	Tetrachloroethene	127-18-4	1 U	1	6	0.94
10237	Tetrahydrofuran	109-99-9	5 U	5	9	0.94
10237	Toluene	108-88-3	1 U	1	6	0.94
10237	1,1,1-Trichloroethane	71-55-6	1 U	1	6	0.94
10237	1,1,2-Trichloroethane	79-00-5	1 U	1	6	0.94
10237	Trichloroethene	79-01-6	1 U	1	6	0.94
10237	Trichlorofluoromethane	75-69-4	140	2	6	0.94
10237	1,2,4-Trimethylbenzene	95-63-6	1 U	1	6	0.94
10237	1,3,5-Trimethylbenzene	108-67-8	1 U	1	6	0.94
10237	Vinyl Chloride	75-01-4	1 U	1	6	0.94
10237	m+p-Xylene	179601-23-1	1 U	1	6	0.94
10237	o-Xylene	95-47-6	1 U	1	6	0.94
10237	Xylene (Total)	1330-20-7	1 U	1	6	0.94

The NJ DKQP analyte list requirement was not met for Method 8260B. The client specified list is reported.

GC/MS Volatiles SW-846 8260FRN Modified			ug/kg	ug/kg	ug/kg
13101	Chlorodifluoroethane	75-68-3	1 U	1	6
13101	Chlorodifluoromethane	75-45-6	2 U	2	6
13101	Chlorofluoromethane	593-70-4	1 U	1	6
13101	Chloropentafluoroethane	76-15-3	17 UZ	17	56
13101	1,1-Dichloro-1-fluoroethane	1717-00-6	1 U	1	6
13101	1,2-Dichloro-1-fluoroethane	430-57-9	1 U	1	6
13101	Dichlorotetrafluoroethane	76-14-2	2 U	2	6
13101	1,2-Dichlorotrifluoroethane	354-23-4	1 U	1	6
13101	Dichlorotrifluoroethane	306-83-2	9	1	6
13101	Fluoromethane	593-53-3	3 UZ	3	11
13101	Freon 113a	354-58-5	6 U	6	22
13101	1,1,2-Trifluoroethane	430-66-0	2 U	2	6
13101	Vinyl fluoride	75-02-5	7 U	7	22

Z= The response for a target analyte(s) in the continuing calibration verification standard is outside the QC acceptance limits. Since the response is high indicating increased sensitivity, and the target analyte(s) is not detected in the sample, the data is reported.

*=This limit was used in the evaluation of the final result

Sample Description: D16-BOR-11-(10.3-10.5) Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304791
ELLE Group #: 1872396
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 13:15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
00884 Volatile Library Search - 15						
The results from the volatile library search are listed on the attached FORM 1 - VOA-TIC. The qualifiers appearing in the "Q" column are defined at the end of the report.						
GC/MS Semivolatiles	SW-846 8270C		ug/kg	ug/kg	ug/kg	
10723	Acenaphthene	83-32-9	24	4	21	1
10723	Acenaphthylene	208-96-8	13 J	4	21	1
10723	Acetophenone	98-86-2	20	U	20	1
10723	4-Aminobiphenyl	92-67-1	200	UZ	200	1
10723	Aniline	62-53-3	200	U	200	1
10723	Anthracene	120-12-7	26	4	21	1
10723	Benzidine	92-87-5	310	U	310	1
10723	Benzo(a)anthracene	56-55-3	4	U	4	1
10723	Benzo(a)pyrene	50-32-8	4	U	4	1
10723	Benzo(b)fluoranthene	205-99-2	4	U	4	1
10723	Benzo(g,h,i)perylene	191-24-2	4	U	4	1
10723	Benzo(k)fluoranthene	207-08-9	4	U	4	1
10723	1,1'-Biphenyl	92-52-4	20	U	20	1
10723	4-Bromophenyl-phenylether	101-55-3	20	U	20	1
10723	Butylbenzylphthalate	85-68-7	81	U	81	1
10723	Di-n-butylphthalate	84-74-2	81	U	81	1
10723	Carbazole	86-74-8	20	U	20	1
10723	4-Chloro-3-methylphenol	59-50-7	20	U	20	1
10723	4-Chloroaniline	106-47-8	41	U	41	1
10723	bis(2-Chloroethoxy)methane	111-91-1	20	U	20	1
10723	bis(2-Chloroethyl)ether	111-44-4	20	U	20	1
10723	2-Chloronaphthalene	91-58-7	8	U	8	1
10723	2-Chlorophenol	95-57-8	20	U	20	1
10723	4-Chlorophenyl-phenylether	7005-72-3	20	U	20	1
10723	2,2'-oxybis(1-Chloropropane)	108-60-1	20	U	20	1
Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10723	Chrysene	218-01-9	4	U	4	1
10723	Dibenz(a,h)anthracene	53-70-3	4	U	4	1
10723	Dibenzofuran	132-64-9	20	U	20	1
10723	3,3'-Dichlorobenzidine	91-94-1	120	U	120	1
10723	2,4-Dichlorophenol	120-83-2	20	U	20	1
10723	Diethylphthalate	84-66-2	81	U	81	1
10723	2,4-Dimethylphenol	105-67-9	20	U	20	1
10723	Dimethylphthalate	131-11-3	81	U	81	1
10723	4,6-Dinitro-2-methylphenol	534-52-1	200	U	200	1
10723	2,4-Dinitrophenol	51-28-5	370	U	370	1,200

*=This limit was used in the evaluation of the final result

Sample Description: D16-BOR-11-(10.3-10.5) Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304791
ELLE Group #: 1872396
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 13:15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	GC/MS Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
10723	2,4-Dinitrotoluene	121-14-2	81 U	81	200	1
10723	2,6-Dinitrotoluene	606-20-2	20 U	20	41	1
10723	1,4-Dioxane	123-91-1	120 U	120	410	1
10723	Diphenyl ether	101-84-8	20 U	20	41	1
10723	1,2-Diphenylhydrazine	122-66-7	20 U	20	41	1
10723	bis(2-Ethylhexyl)phthalate	117-81-7	81 U	81	210	1
10723	Fluoranthene	206-44-0	21	4	21	1
10723	Fluorene	86-73-7	34	4	21	1
10723	Hexachlorobenzene	118-74-1	4 U	4	21	1
10723	Hexachlorobutadiene	87-68-3	20 U	20	41	1
10723	Hexachlorocyclopentadiene	77-47-4	200 U	200	610	1
10723	Hexachloroethane	67-72-1	41 U	41	200	1
10723	Indeno(1,2,3-cd)pyrene	193-39-5	4 U	4	21	1
10723	Isophorone	78-59-1	20 U	20	41	1
10723	2-Methylnaphthalene	91-57-6	5 J	4	21	1
10723	2-Methylphenol	95-48-7	20 U	20	41	1
10723	4-Methylphenol	106-44-5	20 U	20	41	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
10723	Naphthalene	91-20-3	4 U	4	21	1
10723	1-Naphthylamine	134-32-7	200 U	200	610	1
10723	2-Naphthylamine	91-59-8	200 U	200	610	1
10723	2-Nitroaniline	88-74-4	20 U	20	41	1
10723	3-Nitroaniline	99-09-2	81 U	81	200	1
10723	4-Nitroaniline	100-01-6	81 U	81	200	1
10723	Nitrobenzene	98-95-3	20 U	20	41	1
10723	2-Nitrophenol	88-75-5	20 U	20	41	1
10723	4-Nitrophenol	100-02-7	200 U	200	610	1
10723	N-Nitrosodimethylamine	62-75-9	81 U	81	200	1
10723	N-Nitroso-di-n-propylamine	621-64-7	20 U	20	41	1
10723	N-Nitrosodiphenylamine	86-30-6	20 U	20	41	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
10723	Di-n-octylphthalate	117-84-0	81 U	81	200	1
10723	Parathion	56-38-2	200 U	200	610	1
10723	Pentachlorobenzene	608-93-5	20 U	20	41	1
10723	Pentachlorophenol	87-86-5	41 U	41	210	1
10723	Phenanthrene	85-01-8	92	4	21	1
10723	Phenol	108-95-2	20 U	20	41	1
10723	Pyrene	129-00-0	18 J	4	21	1
10723	2,3,4,6-Tetrachlorophenol	58-90-2	81 U	81	200	1

*=This limit was used in the evaluation of the final result

Sample Description: D16-BOR-11-(10.3-10.5) Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304791
ELLE Group #: 1872396
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 13:15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	GC/MS Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
10723	o-Tolidine	95-53-4	240 U	240	810	1
10723	1,2,4-Trichlorobenzene	120-82-1	20 U	20	41	1
10723	2,4,5-Trichlorophenol	95-95-4	20 U	20	41	1
10723	2,4,6-Trichlorophenol	88-06-2	20 U	20	41	1

The project QA/QC requirements were not met.

Project defined QC acceptance limits are not met. All QC is compliant with the laboratory statistically generated limits.

The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. Since the recovery is high and the target analyte(s) was not detected in the sample, the data is reported.

Z=The response for a target analyte(s) in the initial calibration verification standard is outside the QC acceptance limits. Since the response is high indicating increased sensitivity, and the target analyte(s) is not detected in the sample, the data is reported.

00886 SVOA Library Search - 25

The results from the semivolatile library search are listed on the attached FORM 1 - SV-TIC. The qualifiers appearing in the "Q" column are defined at the end of the report.

Wet Chemistry	SW-846 9060A modified	mg/kg	mg/kg	mg/kg	
02079 Total Organic Carbon (TOC)	n.a.	1,320	122	367	1
Wet Chemistry	SM 2540 G-1997	%	%	%	
00111 Moisture	%Moisture Calc	n.a.	18.2	0.50	0.50

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

Sample Comments

State of New Jersey Lab Certification No. PA011

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	TCL Volatiles + Add'l Cmpds	SW-846 8260B	1	X173182AA	11/14/2017 17:58	Linda C Pape	0.94

*=This limit was used in the evaluation of the final result

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Sample Description: D16-BOR-11-(10.3-10.5) Soil
DE RIVER NAPL DELINEATION PHASE III**CRG-The Chemours Co. FC, LLC**
ELLE Sample #: SW 9304791
ELLE Group #: 1872396
Matrix: Soil**Project Name:** CWK - DE RIVER NAPL DELINEATION PHASE IIISubmittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 13:15**Laboratory Sample Analysis Record**

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
13101	Freons	SW-846 8260FRN Modified	1	J173211AA	11/17/2017 16:03	Kevin A Sposito	0.91
08389	GC/MS - LL Encore Prep	SW-846 5035A	1	201731247803	11/08/2017 15:56	Rebecca Williams	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	2	201731247803	11/08/2017 15:59	Rebecca Williams	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	3	201731247803	11/08/2017 16:00	Rebecca Williams	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	4	201731247803	11/08/2017 16:01	Rebecca Williams	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035A	1	201731247803	11/08/2017 15:55	Rebecca Williams	n.a.
10723	TCL SVOAs + Add'l Cmpds	SW-846 8270C	1	17317SLE026	11/16/2017 19:24	Emily Gruver	1
10813	BNA Soil Microwave APP IX	SW-846 3546	1	17317SLE026	11/14/2017 02:50	Samantha M Metzgar	1
02079	Total Organic Carbon (TOC)	SW-846 9060A modified	1	17321667631B	11/17/2017 21:59	Drew M Gerhart	1
00111	Moisture	SM 2540 G-1997 %Moisture Calc	1	17313820011A	11/10/2017 09:29	Larry E Bevins	1

*=This limit was used in the evaluation of the final result

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EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS! _____ !
! DR-12 !

Lab Name: Lancaster Laboratories Contract: _____
Lab Code: LANCAS Case No.: _____ SAS No.: _____ SDG No.: _____
Matrix: (soil/water) SOIL Lab Sample ID: 9304791
Sample wt/vol: 5.33 (g/mL) g Lab File ID: HP09193.i/17nov14a.b/xn14s48.d
Level: (low/med) LOW Date Received: 11/07/17
% Moisture: not dec. 18.2 Date Analyzed: 11/14/17
Column: (pack/cap) CAP Dilution Factor: 1.0
Number TICs found: 0 CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. VOTIC	Total VOC TICs		0	U
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FORM I VOA-TIC

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1F

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

! _____ !
! DR-12 !

Lab Name: Lancaster Laboratories Contract: _____
Lab Code: LANCAS Case No.: _____ SAS No.: _____ SDG No.: _____
Matrix: (soil/water) SOIL Lab Sample ID: 9304791
Sample wt/vol: 30.05 (g/mL) g Lab File ID: pk0612.d
Level: (low/med) LOW Date Received: 11/07/17
% Moisture: 18.2 Decanted: (Y/N) Date Extracted: 11/14/17
Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/16/17
Injection Volume: 1 (uL) Dilution Factor: 1
GPC Cleanup: N pH: Extraction: Mic

CONCENTRATION UNITS:

Number TICs found: 3

(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	!Unknown Aldol Condensate	3.966	1200	JB
2.	!Unknown	5.237	180	J
3.57-10-3	!n-Hexadecanoic acid	10.942	450	J
4.	!			
5.SVOCTIC	!Total SVOC TICs		1900	JB
6.	!			
7.	!			
8.	!			
9.	!			
10.	!			
11.	!			
12.	!			
13.	!			
14.	!			
15.	!			
16.	!			
17.	!			
18.	!			
19.	!			
20.	!			
21.	!			
22.	!			
23.	!			
24.	!			
25.	!			
26.	!			
27.	!			
28.	!			
29.	!			
30.	!			

page 1 of 1

FORM I SV-1

Sample Description: D16-BOR-11-(7.0-7.5)-D Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304792
ELLE Group #: 1872396
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 12:50

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	GC/MS Volatiles	SW-846 8260B	ug/kg	ug/kg	ug/kg	
10237	Acetone	67-64-1	50	8	22	1
10237	Benzene	71-43-2	0.5 U	0.5	5	1
10237	Bromodichloromethane	75-27-4	1 U	1	5	1
10237	2-Butanone	78-93-3	4 U	4	11	1
10237	n-Butylbenzene	104-51-8	1 U	1	5	1
10237	sec-Butylbenzene	135-98-8	1 U	1	5	1
10237	tert-Butylbenzene	98-06-6	1 U	1	5	1
10237	Carbon Disulfide	75-15-0	1 U	1	5	1
10237	Carbon Tetrachloride	56-23-5	1 U	1	5	1
10237	Chlorobenzene	108-90-7	1 U	1	5	1
10237	Chloroethane	75-00-3	2 U	2	5	1
10237	Chloroform	67-66-3	1 U	1	5	1
10237	Chloromethane	74-87-3	2 U	2	5	1
10237	2-Chlorotoluene	95-49-8	1 U	1	5	1
10237	4-Chlorotoluene	106-43-4	1 U	1	5	1
10237	Chlorotrifluoroethene	79-38-9	2 U	2	5	1
10237	Dibromochloromethane	124-48-1	1 U	1	5	1
10237	1,2-Dibromoethane	106-93-4	1 U	1	5	1
10237	1,2-Dichlorobenzene	95-50-1	1 U	1	5	1
10237	1,3-Dichlorobenzene	541-73-1	1 U	1	5	1
10237	1,4-Dichlorobenzene	106-46-7	1 U	1	5	1
10237	Dichlorodifluoromethane	75-71-8	2 U	2	5	1
10237	1,1-Dichloroethane	75-34-3	1 U	1	5	1
10237	1,2-Dichloroethane	107-06-2	1 U	1	5	1
10237	1,1-Dichloroethene	75-35-4	1 U	1	5	1
10237	cis-1,2-Dichloroethene	156-59-2	1 U	1	5	1
10237	trans-1,2-Dichloroethene	156-60-5	1 U	1	5	1
10237	1,2-Dichloroethene (Total)	540-59-0	1 U	1	5	1
10237	Dichlorofluoromethane	75-43-4	2 U	2	5	1
10237	1,2-Dichloropropane	78-87-5	1 U	1	5	1
10237	1,1-Dichloropropene	563-58-6	1 U	1	5	1
10237	cis-1,3-Dichloropropene	10061-01-5	1 U	1	5	1
10237	Ethylbenzene	100-41-4	1 U	1	5	1
10237	Freon 113	76-13-1	2 U	2	11	1
10237	Freon 133a	75-88-7	2 U	2	5	1
10237	n-Hexane	110-54-3	1 U	1	5	1
10237	2-Hexanone	591-78-6	3 U	3	11	1
10237	Isobutyl Alcohol	78-83-1	110 U	110	270	1
10237	Isopropylbenzene	98-82-8	1 U	1	5	1
10237	p-Isopropyltoluene	99-87-6	1 U	1	5	1
10237	Methacrylonitrile	126-98-7	5 U	5	55	1
10237	Methyl Methacrylate	80-62-6	1 U	1	5	1

*=This limit was used in the evaluation of the final result

Sample Description: D16-BOR-11-(7.0-7.5)-D Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304792
ELLE Group #: 1872396
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 12:50

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Volatiles SW-846 8260B						
10237	Methyl Tertiary Butyl Ether	1634-04-4	0.5 U	0.5	5	1
10237	4-Methyl-2-pentanone	108-10-1	3 U	3	11	1
10237	Methylene Chloride	75-09-2	2 U	2	5	1
10237	Propionitrile	107-12-0	33 U	33	110	1
10237	n-Propylbenzene	103-65-1	1 U	1	5	1
10237	Styrene	100-42-5	1 U	1	5	1
10237	1,1,1,2-Tetrachloroethane	630-20-6	1 U	1	5	1
10237	1,1,2,2-Tetrachloroethane	79-34-5	1 U	1	5	1
10237	Tetrachloroethene	127-18-4	1 U	1	5	1
10237	Tetrahydrofuran	109-99-9	4 U	4	9	1
10237	Toluene	108-88-3	1 U	1	5	1
10237	1,1,1-Trichloroethane	71-55-6	1 U	1	5	1
10237	1,1,2-Trichloroethane	79-00-5	1 U	1	5	1
10237	Trichloroethene	79-01-6	1 U	1	5	1
10237	Trichlorofluoromethane	75-69-4	2 U	2	5	1
10237	1,2,4-Trimethylbenzene	95-63-6	1 U	1	5	1
10237	1,3,5-Trimethylbenzene	108-67-8	1 U	1	5	1
10237	Vinyl Chloride	75-01-4	1 U	1	5	1
10237	m+p-Xylene	179601-23-1	1 U	1	5	1
10237	o-Xylene	95-47-6	1 U	1	5	1
10237	Xylene (Total)	1330-20-7	1 U	1	5	1

The NJ DKQP analyte list requirement was not met for Method 8260B. The client specified list is reported.

GC/MS Volatiles	SW-846 8260FRN Modified	ug/kg	ug/kg	ug/kg		
13101	Chlorodifluoroethane	75-68-3	1 U	1	5	0.96
13101	Chlorodifluoromethane	75-45-6	2 U	2	5	0.96
13101	Chlorofluoromethane	593-70-4	1 U	1	5	0.96
13101	Chloropentafluoroethane	76-15-3	16 UZ	16	53	0.96
13101	1,1-Dichloro-1-fluoroethane	1717-00-6	1 U	1	5	0.96
13101	1,2-Dichloro-1-fluoroethane	430-57-9	1 U	1	5	0.96
13101	Dichlorotetrafluoroethane	76-14-2	2 U	2	5	0.96
13101	1,2-Dichlorotrifluoroethane	354-23-4	1 U	1	5	0.96
13101	Dichlorotrifluoroethane	306-83-2	1 U	1	5	0.96
13101	Fluoromethane	593-53-3	3 UZ	3	11	0.96
13101	Freon 113a	354-58-5	5 U	5	21	0.96
13101	1,1,2-Trifluoroethane	430-66-0	2 U	2	5	0.96
13101	Vinyl fluoride	75-02-5	6 U	6	21	0.96

Z= The response for a target analyte(s) in the continuing calibration verification standard is outside the QC acceptance limits. Since the response is high indicating increased sensitivity, and the target analyte(s) is not detected in the sample, the data is reported.

*=This limit was used in the evaluation of the final result

Sample Description: D16-BOR-11-(7.0-7.5)-D Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304792
ELLE Group #: 1872396
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 12:50

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
00884 Volatile Library Search - 15						
The results from the volatile library search are listed on the attached FORM 1 - VOA-TIC. The qualifiers appearing in the "Q" column are defined at the end of the report.						
GC/MS Semivolatiles	SW-846 8270C		ug/kg	ug/kg	ug/kg	
10723	Acenaphthene	83-32-9	17	J	4	19
10723	Acenaphthylene	208-96-8	9	J	4	19
10723	Acetophenone	98-86-2	18	U	18	36
10723	4-Aminobiphenyl	92-67-1	180	UZ	180	540
10723	Aniline	62-53-3	180	U	180	540
10723	Anthracene	120-12-7	19		4	19
10723	Benzidine	92-87-5	270	U	270	540
10723	Benzo(a)anthracene	56-55-3	4	U	4	19
10723	Benzo(a)pyrene	50-32-8	4	U	4	19
10723	Benzo(b)fluoranthene	205-99-2	4	U	4	19
10723	Benzo(g,h,i)perylene	191-24-2	4	U	4	19
10723	Benzo(k)fluoranthene	207-08-9	4	U	4	19
10723	1,1'-Biphenyl	92-52-4	18	U	18	36
10723	4-Bromophenyl-phenylether	101-55-3	18	U	18	36
10723	Butylbenzylphthalate	85-68-7	73	U	73	180
10723	Di-n-butylphthalate	84-74-2	73	U	73	180
10723	Carbazole	86-74-8	18	U	18	36
10723	4-Chloro-3-methylphenol	59-50-7	18	U	18	36
10723	4-Chloroaniline	106-47-8	36	U	36	73
10723	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	36
10723	bis(2-Chloroethyl)ether	111-44-4	18	U	18	36
10723	2-Chloronaphthalene	91-58-7	7	U	7	36
10723	2-Chlorophenol	95-57-8	18	U	18	36
10723	4-Chlorophenyl-phenylether	7005-72-3	18	U	18	36
10723	2,2'-oxybis(1-Chloropropane)	108-60-1	18	U	18	36
Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10723	Chrysene	218-01-9	4	U	4	19
10723	Dibenz(a,h)anthracene	53-70-3	4	U	4	19
10723	Dibenzofuran	132-64-9	18	U	18	36
10723	3,3'-Dichlorobenzidine	91-94-1	110	U	110	360
10723	2,4-Dichlorophenol	120-83-2	18	U	18	36
10723	Diethylphthalate	84-66-2	73	U	73	180
10723	2,4-Dimethylphenol	105-67-9	18	U	18	36
10723	Dimethylphthalate	131-11-3	73	U	73	180
10723	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	540
10723	2,4-Dinitrophenol	51-28-5	330	U	330	1,100

*=This limit was used in the evaluation of the final result

Sample Description: D16-BOR-11-(7.0-7.5)-D Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304792
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Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 12:50

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	GC/MS Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
10723	2,4-Dinitrotoluene	121-14-2	73 U	73	180	1
10723	2,6-Dinitrotoluene	606-20-2	18 U	18	36	1
10723	1,4-Dioxane	123-91-1	110 U	110	360	1
10723	Diphenyl ether	101-84-8	18 U	18	36	1
10723	1,2-Diphenylhydrazine	122-66-7	18 U	18	36	1
10723	bis(2-Ethylhexyl)phthalate	117-81-7	73 U	73	190	1
10723	Fluoranthene	206-44-0	19	4	19	1
10723	Fluorene	86-73-7	24	4	19	1
10723	Hexachlorobenzene	118-74-1	4 U	4	19	1
10723	Hexachlorobutadiene	87-68-3	18 U	18	36	1
10723	Hexachlorocyclopentadiene	77-47-4	180 U	180	540	1
10723	Hexachloroethane	67-72-1	36 U	36	180	1
10723	Indeno(1,2,3-cd)pyrene	193-39-5	4 U	4	19	1
10723	Isophorone	78-59-1	18 U	18	36	1
10723	2-Methylnaphthalene	91-57-6	8 J	4	19	1
10723	2-Methylphenol	95-48-7	18 U	18	36	1
10723	4-Methylphenol	106-44-5	18 U	18	36	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
10723	Naphthalene	91-20-3	21	4	19	1
10723	1-Naphthylamine	134-32-7	180 U	180	540	1
10723	2-Naphthylamine	91-59-8	180 U	180	540	1
10723	2-Nitroaniline	88-74-4	18 U	18	36	1
10723	3-Nitroaniline	99-09-2	73 U	73	180	1
10723	4-Nitroaniline	100-01-6	73 U	73	180	1
10723	Nitrobenzene	98-95-3	18 U	18	36	1
10723	2-Nitrophenol	88-75-5	18 U	18	36	1
10723	4-Nitrophenol	100-02-7	180 U	180	540	1
10723	N-Nitrosodimethylamine	62-75-9	73 U	73	180	1
10723	N-Nitroso-di-n-propylamine	621-64-7	18 U	18	36	1
10723	N-Nitrosodiphenylamine	86-30-6	18 U	18	36	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
10723	Di-n-octylphthalate	117-84-0	73 U	73	180	1
10723	Parathion	56-38-2	180 U	180	540	1
10723	Pentachlorobenzene	608-93-5	18 U	18	36	1
10723	Pentachlorophenol	87-86-5	36 U	36	190	1
10723	Phenanthrene	85-01-8	72	4	19	1
10723	Phenol	108-95-2	18 U	18	36	1
10723	Pyrene	129-00-0	14 J	4	19	1
10723	2,3,4,6-Tetrachlorophenol	58-90-2	73 U	73	180	1

*=This limit was used in the evaluation of the final result

Sample Description: D16-BOR-11-(7.0-7.5)-D Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304792
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Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

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	GC/MS Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
10723	o-Tolidine	95-53-4	220 U	220	730	1
10723	1,2,4-Trichlorobenzene	120-82-1	18 U	18	36	1
10723	2,4,5-Trichlorophenol	95-95-4	18 U	18	36	1
10723	2,4,6-Trichlorophenol	88-06-2	18 U	18	36	1

The project QA/QC requirements were not met.

Project defined QC acceptance limits are not met. All QC is compliant with the laboratory statistically generated limits.

The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. Since the recovery is high and the target analyte(s) was not detected in the sample, the data is reported.

Z=The response for a target analyte(s) in the initial calibration verification standard is outside the QC acceptance limits. Since the response is high indicating increased sensitivity, and the target analyte(s) is not detected in the sample, the data is reported.

00886 SVOA Library Search - 25

The results from the semivolatile library search are listed on the attached FORM 1 - SV-TIC. The qualifiers appearing in the "Q" column are defined at the end of the report.

Metals	SW-846 6010B	mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	5,430	7.80	17.4
01650	Calcium	7440-70-2	70.9	2.91	17.4
01654	Iron	7439-89-6	8,620	7.02	17.4
01657	Magnesium	7439-95-4	1,320	2.12	8.72
01662	Potassium	7440-09-7	576	14.6	43.6
01667	Sodium	7440-23-5	72.0 J	14.6	87.2
06972	Zinc	7440-66-6	18.3	0.209	1.74

	SW-846 6020	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.110 J	0.0813	0.174
06125	Arsenic	7440-38-2	0.700	0.112	0.349
06126	Barium	7440-39-3	13.4	0.158	0.349
06127	Beryllium	7440-41-7	0.204	0.0091	0.0872
06128	Cadmium	7440-43-9	0.0300 U	0.0300	0.0872
06131	Chromium	7440-47-3	17.4	0.152	0.349
06132	Cobalt	7440-48-4	5.03	0.0272	0.0872
06133	Copper	7440-50-8	7.85	0.0935	0.349
06135	Lead	7439-92-1	3.82	0.0194	0.174
06137	Manganese	7439-96-5	76.9	0.158	0.349
06139	Nickel	7440-02-0	12.1	0.174	0.349

*=This limit was used in the evaluation of the final result



Sample Description: D16-BOR-11-(7.0-7.5)-D Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304792
ELLE Group #: 1872396
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 12:50

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	SW-846 6020		mg/kg	mg/kg	mg/kg	
06141	Selenium	7782-49-2	0.0872 U	0.0872	0.349	2
06142	Silver	7440-22-4	0.0255 U	0.0255	0.0872	2
06145	Thallium	7440-28-0	0.0314 J	0.0218	0.0872	2
06148	Vanadium	7440-62-2	14.5	0.0372	0.0872	2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.0102 U	0.0102	0.102	1
Wet Chemistry	SW-846 9060A modified		mg/kg	mg/kg	mg/kg	
02079	Total Organic Carbon (TOC)	n.a.	243 J	112	337	1
Wet Chemistry	SM 2540 G-1997 %Moisture Calc		%	%	%	
00111	Moisture	n.a.	8.3	0.50	0.50	1
Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

Sample Comments

State of New Jersey Lab Certification No. PA011

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	TCL Volatiles + Add'l Cmpds	SW-846 8260B	1	X173182AA	11/14/2017 18:22	Linda C Pape	1
13101	Freons	SW-846 8260FRN Modified	1	J173211AA	11/17/2017 16:33	Kevin A Sposito	0.96
08389	GC/MS - LL Encore Prep	SW-846 5035A	1	201731247803	11/08/2017 16:07	Rebecca Williams	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	2	201731247803	11/08/2017 16:08	Rebecca Williams	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	3	201731247803	11/08/2017 16:09	Rebecca Williams	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	4	201731247803	11/08/2017 16:10	Rebecca Williams	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035A	1	201731247803	11/08/2017 16:06	Rebecca Williams	n.a.
10723	TCL SVOAs + Add'l Cmpds	SW-846 8270C	1	17317SLE026	11/16/2017 19:48	Emily Gruver	1
10813	BNA Soil Microwave APP IX	SW-846 3546	1	17317SLE026	11/14/2017 02:50	Samantha M Metzgar	1
01643	Aluminum	SW-846 6010B	1	173120570804	11/13/2017 04:46	Jonathan J Allen	1
01650	Calcium	SW-846 6010B	1	173120570804	11/13/2017 04:46	Jonathan J Allen	1
01654	Iron	SW-846 6010B	1	173120570804	11/13/2017 04:46	Jonathan J Allen	1
01657	Magnesium	SW-846 6010B	1	173120570804	11/13/2017 04:46	Jonathan J Allen	1
01662	Potassium	SW-846 6010B	1	173120570804	11/13/2017 04:46	Jonathan J Allen	1
01667	Sodium	SW-846 6010B	1	173120570804	11/13/2017 04:46	Jonathan J Allen	1
06972	Zinc	SW-846 6010B	1	173120570804	11/13/2017 04:46	Jonathan J Allen	1
06124	Antimony	SW-846 6020	1	173120570804A	11/17/2017 13:33	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

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Sample Description: D16-BOR-11-(7.0-7.5)-D Soil
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9304792
ELLE Group #: 1872396
Matrix: Soil

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 12:50

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06125	Arsenic	SW-846 6020	1	173120570804A	11/29/2017 17:31	Bradley M Berlot	2
06126	Barium	SW-846 6020	1	173120570804D	11/17/2017 13:33	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	173120570804A	11/17/2017 13:33	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	173120570804A	11/17/2017 13:33	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	173120570804A	11/17/2017 13:33	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	173120570804A	11/17/2017 13:33	Choon Y Tian	2
06133	Copper	SW-846 6020	1	173120570804A	11/17/2017 13:33	Choon Y Tian	2
06135	Lead	SW-846 6020	1	173120570804A	11/17/2017 13:33	Choon Y Tian	2
06137	Manganese	SW-846 6020	1	173120570804A	11/17/2017 13:33	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	173120570804A	11/17/2017 13:33	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	173120570804B	11/17/2017 13:33	Choon Y Tian	2
06142	Silver	SW-846 6020	1	173120570804A	11/17/2017 13:33	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	173120570804A	11/17/2017 13:33	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	173120570804A	11/17/2017 13:33	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	173120571101	11/09/2017 10:16	Damary Valentin	1
05708	ICP-ICPMS - SW, 3050B - U3	SW-846 3050B	1	173120570804	11/09/2017 17:05	Barbara A Kane	1
05711	Hg-SW, 7471A - U3	SW-846 7471A	1	173120571101	11/09/2017 07:36	James L Mertz	1
02079	Total Organic Carbon (TOC)	SW-846 9060A modified	1	17325667631A	11/21/2017 22:15	Drew M Gerhart	1
00111	Moisture	SM 2540 G-1997 %Moisture Calc	1	17313820011A	11/10/2017 09:29	Larry E Bevins	1

*=This limit was used in the evaluation of the final result

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1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

! _____ !
! DR-13 !

Lab Name: Lancaster Laboratories Contract: _____
Lab Code: LANCAS Case No.: _____ SAS No.: _____ SDG No.: _____
Matrix: (soil/water) SOIL Lab Sample ID: 9304792
Sample wt/vol: 5.0 (g/mL) g Lab File ID: HP09193.i/17nov14a.b/xn14s49.d
Level: (low/med) LOW Date Received: 11/07/17
% Moisture: not dec. 8.3 Date Analyzed: 11/14/17
Column: (pack/cap) CAP Dilution Factor: 1.0
Number TICs found: 1 CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown	13.11	7	J
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3.	VOCTIC Total VOC TICs		7	J
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page 1 of 1

FORM I VOA-TIC

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

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! DR-13 !

Lab Name: Lancaster Laboratories Contract: _____
Lab Code: LANCAS Case No.: _____ SAS No.: _____ SDG No.: _____
Matrix: (soil/water) SOIL Lab Sample ID: 9304792
Sample wt/vol: 30.02(g/mL) g Lab File ID: pk0613.d
Level: (low/med) LOW Date Received: 11/07/17
% Moisture: 8.3 Decanted: (Y/N) Date Extracted: 11/14/17
Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/16/17
Injection Volume: 1 (uL) Dilution Factor: 1
GPC Cleanup: N pH: Extraction: Mic

CONCENTRATION UNITS:

Number TICs found: 2

(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.625-86-5	Furan, 2,5-dimethyl-	1.866	150	JB
2.	Unknown Aldol Condensate	3.972	550	JB
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4.SVOCTIC	Total SVOC TICs		700	JB
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FORM I SV-1

Sample Description: CWKDERIVER3-TBLK-6 Blank Water
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: WW 9304793
ELLE Group #: 1872396
Matrix: Blank Water

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15

Collection Date/Time: 11/07/2017 09:30

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
	GC/MS Volatiles	SW-846 8260B	ug/l	ug/l	ug/l	
10335	Acetone	67-64-1	6 U	6	20	1
10335	Benzene	71-43-2	0.5 U	0.5	1	1
10335	Bromodichloromethane	75-27-4	0.5 U	0.5	1	1
10335	2-Butanone	78-93-3	3 U	3	10	1
10335	n-Butylbenzene	104-51-8	1 U	1	5	1
10335	sec-Butylbenzene	135-98-8	1 U	1	5	1
10335	tert-Butylbenzene	98-06-6	1 U	1	5	1
10335	Carbon Disulfide	75-15-0	1 U	1	5	1
10335	Carbon Tetrachloride	56-23-5	0.5 U	0.5	1	1
10335	Chlorobenzene	108-90-7	0.5 U	0.5	1	1
10335	Chloroethane	75-00-3	0.5 U	0.5	1	1
10335	Chloroform	67-66-3	0.5 U	0.5	1	1
10335	Chloromethane	74-87-3	0.5 U	0.5	1	1
10335	2-Chlorotoluene	95-49-8	1 U	1	5	1
10335	4-Chlorotoluene	106-43-4	1 U	1	5	1
10335	Chlorotrifluoroethene	79-38-9	2 U	2	5	1
10335	Dibromochloromethane	124-48-1	0.5 U	0.5	1	1
10335	1,2-Dibromoethane	106-93-4	0.5 U	0.5	1	1
10335	1,2-Dichlorobenzene	95-50-1	1 U	1	5	1
10335	1,3-Dichlorobenzene	541-73-1	1 U	1	5	1
10335	1,4-Dichlorobenzene	106-46-7	1 U	1	5	1
10335	Dichlorodifluoromethane	75-71-8	0.5 U	0.5	1	1
10335	1,1-Dichloroethane	75-34-3	0.5 U	0.5	1	1
10335	1,2-Dichloroethane	107-06-2	0.5 U	0.5	1	1
10335	1,1-Dichloroethene	75-35-4	0.5 U	0.5	1	1
10335	cis-1,2-Dichloroethene	156-59-2	0.5 U	0.5	1	1
10335	trans-1,2-Dichloroethene	156-60-5	0.5 U	0.5	1	1
10335	1,2-Dichloroethene (Total)	540-59-0	0.5 U	0.5	1	1
10335	Dichlorofluoromethane	75-43-4	0.5 U	0.5	1	1
10335	1,2-Dichloropropane	78-87-5	0.5 U	0.5	1	1
10335	1,1-Dichloropropene	563-58-6	1 U	1	5	1
10335	cis-1,3-Dichloropropene	10061-01-5	0.5 U	0.5	1	1
10335	Ethylbenzene	100-41-4	0.5 U	0.5	1	1
10335	Freon 113	76-13-1	2 U	2	10	1
10335	Freon 133a	75-88-7	2 U	2	5	1
10335	n-Hexane	110-54-3	2 U	2	5	1
10335	2-Hexanone	591-78-6	3 U	3	10	1
10335	Isobutyl Alcohol	78-83-1	100 U	100	250	1
10335	Isopropylbenzene	98-82-8	1 U	1	5	1
10335	p-Isopropyltoluene	99-87-6	1 U	1	5	1
10335	Methacrylonitrile	126-98-7	10 U	10	50	1
10335	Methyl Methacrylate	80-62-6	1 U	1	5	1

*=This limit was used in the evaluation of the final result

Sample Description: CWKDERIVER3-TBLK-6 Blank Water
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: WW 9304793
ELLE Group #: 1872396
Matrix: Blank Water

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15

Collection Date/Time: 11/07/2017 09:30

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
	GC/MS Volatiles	SW-846 8260B	ug/l	ug/l	ug/l	
10335	Methyl Tertiary Butyl Ether	1634-04-4	0.5 U	0.5	1	1
10335	4-Methyl-2-pentanone	108-10-1	3 U	3	10	1
10335	Methylene Chloride	75-09-2	0.5 U	0.5	1	1
10335	Propionitrile	107-12-0	30 U	30	100	1
10335	n-Propylbenzene	103-65-1	1 U	1	5	1
10335	Styrene	100-42-5	1 U	1	5	1
10335	1,1,1,2-Tetrachloroethane	630-20-6	0.5 U	0.5	1	1
10335	1,1,2,2-Tetrachloroethane	79-34-5	0.5 U	0.5	1	1
10335	Tetrachloroethene	127-18-4	0.5 U	0.5	1	1
10335	Tetrahydrofuran	109-99-9	4 U	4	10	1
10335	Toluene	108-88-3	0.5 U	0.5	1	1
10335	1,1,1-Trichloroethane	71-55-6	0.5 U	0.5	1	1
10335	1,1,2-Trichloroethane	79-00-5	0.5 U	0.5	1	1
10335	Trichloroethene	79-01-6	0.5 U	0.5	1	1
10335	Trichlorofluoromethane	75-69-4	0.5 U	0.5	1	1
10335	1,2,4-Trimethylbenzene	95-63-6	1 U	1	5	1
10335	1,3,5-Trimethylbenzene	108-67-8	1 U	1	5	1
10335	Vinyl Chloride	75-01-4	0.5 U	0.5	1	1
10335	m+p-Xylene	179601-23-1	0.5 U	0.5	1	1
10335	o-Xylene	95-47-6	0.5 U	0.5	1	1
10335	Xylene (Total)	1330-20-7	0.5 U	0.5	1	1

The NJ DKQP analyte list requirement was not met for Method 8260B. The client specified list is reported.

The NJ DKQP required reporting limit could not be attained for 1,2-Dibromoethane.

GC/MS Volatiles	SW-846 8260FRN Modified	ug/l	ug/l	ug/l	
13066	Chlorodifluoroethane	75-68-3	1 UZ	1	5
13066	Chlorodifluoromethane	75-45-6	2 UZ	2	5
13066	Chlorofluoromethane	593-70-4	1 U	1	5
13066	Chloropentafluoroethane	76-15-3	15 U	15	50
13066	1,1-Dichloro-1-fluoroethane	1717-00-6	1 UZ	1	5
13066	1,2-Dichloro-1-fluoroethane	430-57-9	1 U	1	5
13066	Dichlorotetrafluoroethane	76-14-2	2 UZ	2	5
13066	1,2-Dichlorotrifluoroethane	354-23-4	1 U	1	5
13066	Dichlorotrifluoroethane	306-83-2	1 U	1	5
13066	Fluoromethane	593-53-3	3 UZ	3	10
13066	Freon 113a	354-58-5	5 U	5	20
13066	1,1,2-Trifluoroethane	430-66-0	2 UZ	2	5
13066	Vinyl fluoride	75-02-5	2 U	2	10

Z= The response for a target analyte(s) in the continuing calibration verification standard is outside the QC acceptance limits. Since the response is high indicating increased

*=This limit was used in the evaluation of the final result

Sample Description: CWKDERIVER3-TBLK-6 Blank Water
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: WW 9304793
ELLE Group #: 1872396
Matrix: Blank Water

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 09:30

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
sensitivity, and the target analyte(s) is not detected in the sample, the data is reported.						

00884 Volatile Library Search - 15

The results from the volatile library search are listed on the attached FORM 1 - VOA-TIC. The qualifiers appearing in the "Q" column are defined at the end of the report.

Sample Comments

State of New Jersey Lab Certification No. PA011

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	TCL Volatiles + Add'l Cmpds	SW-846 8260B	1	Y173182AA	11/15/2017 00:17	Don V Viray	1
13066	Freons	SW-846 8260FRN Modified	1	J173201AA	11/16/2017 12:53	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Y173182AA	11/15/2017 00:17	Don V Viray	1

*=This limit was used in the evaluation of the final result

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1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS! _____ !
! DR-14 !

Lab Name: Lancaster Laboratories Contract: _____
Lab Code: LANCAS Case No.: SAS No.: SDG No.:
Matrix: (soil/water) WATER Lab Sample ID: 9304793
Sample wt/vol: 5.0 (g/mL) mL Lab File ID: HP09355.i/17nov14b.b/yn14s51.d
Level: (low/med) LOW Date Received: 11/07/17
% Moisture: not dec. Date Analyzed: 11/15/17
Column: (pack/cap) CAP Dilution Factor: 1.0
Number TICs found: 0 CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. VOCTIC	Total VOC TICs		0	U
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page 1 of 1

FORM I VOA-TIC

Sample Description: CWKDERIVER-EQBLK-6 Blank Water
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: WW 9304794
ELLE Group #: 1872396
Matrix: Blank Water

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15

Collection Date/Time: 11/07/2017 09:30

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
	GC/MS Volatiles	SW-846 8260B	ug/l	ug/l	ug/l	
10335	Acetone	67-64-1	6 U	6	20	1
10335	Benzene	71-43-2	0.5 U	0.5	1	1
10335	Bromodichloromethane	75-27-4	0.5 U	0.5	1	1
10335	2-Butanone	78-93-3	3 U	3	10	1
10335	n-Butylbenzene	104-51-8	1 U	1	5	1
10335	sec-Butylbenzene	135-98-8	1 U	1	5	1
10335	tert-Butylbenzene	98-06-6	1 U	1	5	1
10335	Carbon Disulfide	75-15-0	1 U	1	5	1
10335	Carbon Tetrachloride	56-23-5	0.5 U	0.5	1	1
10335	Chlorobenzene	108-90-7	0.5 U	0.5	1	1
10335	Chloroethane	75-00-3	0.5 U	0.5	1	1
10335	Chloroform	67-66-3	0.5 U	0.5	1	1
10335	Chloromethane	74-87-3	0.5 U	0.5	1	1
10335	2-Chlorotoluene	95-49-8	1 U	1	5	1
10335	4-Chlorotoluene	106-43-4	1 U	1	5	1
10335	Chlorotrifluoroethene	79-38-9	2 U	2	5	1
10335	Dibromochloromethane	124-48-1	0.5 U	0.5	1	1
10335	1,2-Dibromoethane	106-93-4	0.5 U	0.5	1	1
10335	1,2-Dichlorobenzene	95-50-1	1 U	1	5	1
10335	1,3-Dichlorobenzene	541-73-1	1 U	1	5	1
10335	1,4-Dichlorobenzene	106-46-7	1 U	1	5	1
10335	Dichlorodifluoromethane	75-71-8	0.5 U	0.5	1	1
10335	1,1-Dichloroethane	75-34-3	0.5 U	0.5	1	1
10335	1,2-Dichloroethane	107-06-2	0.5 U	0.5	1	1
10335	1,1-Dichloroethene	75-35-4	0.5 U	0.5	1	1
10335	cis-1,2-Dichloroethene	156-59-2	0.5 U	0.5	1	1
10335	trans-1,2-Dichloroethene	156-60-5	0.5 U	0.5	1	1
10335	1,2-Dichloroethene (Total)	540-59-0	0.5 U	0.5	1	1
10335	Dichlorofluoromethane	75-43-4	0.5 U	0.5	1	1
10335	1,2-Dichloropropane	78-87-5	0.5 U	0.5	1	1
10335	1,1-Dichloropropene	563-58-6	1 U	1	5	1
10335	cis-1,3-Dichloropropene	10061-01-5	0.5 U	0.5	1	1
10335	Ethylbenzene	100-41-4	0.5 U	0.5	1	1
10335	Freon 113	76-13-1	2 U	2	10	1
10335	Freon 133a	75-88-7	2 U	2	5	1
10335	n-Hexane	110-54-3	2 U	2	5	1
10335	2-Hexanone	591-78-6	3 U	3	10	1
10335	Isobutyl Alcohol	78-83-1	100 U	100	250	1
10335	Isopropylbenzene	98-82-8	1 U	1	5	1
10335	p-Isopropyltoluene	99-87-6	1 U	1	5	1
10335	Methacrylonitrile	126-98-7	10 U	10	50	1
10335	Methyl Methacrylate	80-62-6	1 U	1	5	1

*=This limit was used in the evaluation of the final result

Sample Description: CWKDERIVER-EQBLK-6 Blank Water
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: WW 9304794
ELLE Group #: 1872396
Matrix: Blank Water

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15

Collection Date/Time: 11/07/2017 09:30

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
	GC/MS Volatiles	SW-846 8260B	ug/l	ug/l	ug/l	
10335	Methyl Tertiary Butyl Ether	1634-04-4	0.5 U	0.5	1	1
10335	4-Methyl-2-pentanone	108-10-1	3 U	3	10	1
10335	Methylene Chloride	75-09-2	0.5 U	0.5	1	1
10335	Propionitrile	107-12-0	30 U	30	100	1
10335	n-Propylbenzene	103-65-1	1 U	1	5	1
10335	Styrene	100-42-5	1 U	1	5	1
10335	1,1,1,2-Tetrachloroethane	630-20-6	0.5 U	0.5	1	1
10335	1,1,2,2-Tetrachloroethane	79-34-5	0.5 U	0.5	1	1
10335	Tetrachloroethene	127-18-4	0.5 U	0.5	1	1
10335	Tetrahydrofuran	109-99-9	4 U	4	10	1
10335	Toluene	108-88-3	0.5 U	0.5	1	1
10335	1,1,1-Trichloroethane	71-55-6	0.5 U	0.5	1	1
10335	1,1,2-Trichloroethane	79-00-5	0.5 U	0.5	1	1
10335	Trichloroethene	79-01-6	0.5 U	0.5	1	1
10335	Trichlorofluoromethane	75-69-4	0.5 U	0.5	1	1
10335	1,2,4-Trimethylbenzene	95-63-6	1 U	1	5	1
10335	1,3,5-Trimethylbenzene	108-67-8	1 U	1	5	1
10335	Vinyl Chloride	75-01-4	0.5 U	0.5	1	1
10335	m+p-Xylene	179601-23-1	0.5 U	0.5	1	1
10335	o-Xylene	95-47-6	0.5 U	0.5	1	1
10335	Xylene (Total)	1330-20-7	0.5 U	0.5	1	1

The NJ DKQP analyte list requirement was not met for Method 8260B. The client specified list is reported.

The NJ DKQP required reporting limit could not be attained for 1,2-Dibromoethane.

GC/MS Volatiles	SW-846 8260FRN Modified	ug/l	ug/l	ug/l	
13066	Chlorodifluoroethane	75-68-3	1 UZ	1	5
13066	Chlorodifluoromethane	75-45-6	2 UZ	2	5
13066	Chlorofluoromethane	593-70-4	1 U	1	5
13066	Chloropentafluoroethane	76-15-3	15 U	15	50
13066	1,1-Dichloro-1-fluoroethane	1717-00-6	1 UZ	1	5
13066	1,2-Dichloro-1-fluoroethane	430-57-9	1 U	1	5
13066	Dichlorotetrafluoroethane	76-14-2	2 UZ	2	5
13066	1,2-Dichlorotrifluoroethane	354-23-4	1 U	1	5
13066	Dichlorotrifluoroethane	306-83-2	1 U	1	5
13066	Fluoromethane	593-53-3	3 UZ	3	10
13066	Freon 113a	354-58-5	5 U	5	20
13066	1,1,2-Trifluoroethane	430-66-0	2 UZ	2	5
13066	Vinyl fluoride	75-02-5	2 U	2	10

Z= The response for a target analyte(s) in the continuing calibration verification standard is outside the QC acceptance limits. Since the response is high indicating increased

*=This limit was used in the evaluation of the final result

Sample Description: CWKDERIVER-EQBLK-6 Blank Water
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: WW 9304794
ELLE Group #: 1872396

Matrix: Blank Water

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15

Collection Date/Time: 11/07/2017 09:30

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
sensitivity, and the target analyte(s) is not detected in the sample, the data is reported.						

00884 Volatile Library Search - 15

The results from the volatile library search are listed on the attached FORM 1 - VOA-TIC. The qualifiers appearing in the "Q" column are defined at the end of the report.

GC/MS Semivolatiles	SW-846 8270C	ug/l	ug/l	ug/l		
14239 Acenaphthene	83-32-9	0.3 U	0.3	1	1	
14239 Acenaphthylene	208-96-8	0.3 U	0.3	1	1	
14239 Acetophenone	98-86-2	1 U	1	3	1	
14239 4-Aminobiphenyl	92-67-1	1 UZ	1	3	1	
14239 Aniline	62-53-3	1 U	1	3	1	
14239 Anthracene	120-12-7	0.3 U	0.3	1	1	
14239 Benzidine	92-87-5	51 U	51	150	1	
14239 Benzo(a)anthracene	56-55-3	0.3 U	0.3	1	1	
14239 Benzo(a)pyrene	50-32-8	0.3 U	0.3	1	1	
14239 Benzo(b)fluoranthene	205-99-2	0.3 U	0.3	1	1	
14239 Benzo(g,h,i)perylene	191-24-2	0.3 U	0.3	1	1	
14239 Benzo(k)fluoranthene	207-08-9	0.3 U	0.3	1	1	
14239 1,1'-Biphenyl	92-52-4	1 U	1	3	1	
14239 4-Bromophenyl-phenylether	101-55-3	1 U	1	3	1	
14239 Butylbenzylphthalate	85-68-7	5 U	5	13	1	
14239 Di-n-butylphthalate	84-74-2	5 U	5	13	1	
14239 Carbazole	86-74-8	1 U	1	3	1	
14239 4-Chloro-3-methylphenol	59-50-7	1 U	1	3	1	
14239 4-Chloroaniline	106-47-8	5 U	5	10	1	
14239 bis(2-Chloroethoxy)methane	111-91-1	1 U	1	3	1	
14239 bis(2-Chloroethyl)ether	111-44-4	1 U	1	3	1	
14239 2-Chloronaphthalene	91-58-7	1 U	1	3	1	
14239 2-Chlorophenol	95-57-8	1 U	1	3	1	
14239 4-Chlorophenyl-phenylether	7005-72-3	1 U	1	3	1	
14239 2,2'-Oxybis(1-Chloropropane)	108-60-1	1 U	1	3	1	
Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
14239 Chrysene	218-01-9	0.3 U	0.3	1	1	
14239 Dibenz(a,h)anthracene	53-70-3	0.3 U	0.3	1	1	
14239 Dibenzofuran	132-64-9	1 U	1	3	1	
14239 3,3'-Dichlorobenzidine	91-94-1	5 U	5	13	1	
14239 2,4-Dichlorophenol	120-83-2	1 U	1	3	1	
14239 Diethylphthalate	84-66-2	5 U	5	13	1	
14239 2,4-Dimethylphenol	105-67-9	1 U	1	3	1	
14239 Dimethylphthalate	131-11-3	5 U	5	13	1	

*=This limit was used in the evaluation of the final result

Sample Description: CWKDERIVER-EQBLK-6 Blank Water
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: WW 9304794
ELLE Group #: 1872396
Matrix: Blank Water

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 09:30

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
	GC/MS Semivolatiles	SW-846 8270C		ug/l	ug/l	ug/l
14239	4,6-Dinitro-2-methylphenol	534-52-1	13 U	13	38	1
14239	2,4-Dinitrophenol	51-28-5	25 U	25	76	1
14239	2,4-Dinitrotoluene	121-14-2	3 U	3	13	1
14239	2,6-Dinitrotoluene	606-20-2	1 U	1	3	1
14239	1,4-Dioxane	123-91-1	3 U	3	13	1
14239	Diphenyl ether	101-84-8	1 U	1	3	1
14239	1,2-Diphenylhydrazine	122-66-7	1 U	1	3	1
14239	bis(2-Ethylhexyl)phthalate	117-81-7	5 U	5	13	1
14239	Fluoranthene	206-44-0	0.3 U	0.3	1	1
14239	Fluorene	86-73-7	0.3 U	0.3	1	1
14239	Hexachlorobenzene	118-74-1	0.3 U	0.3	1	1
14239	Hexachlorobutadiene	87-68-3	1 U	1	3	1
14239	Hexachlorocyclopentadiene	77-47-4	13 U	13	38	1
14239	Hexachloroethane	67-72-1	3 U	3	13	1
14239	Indeno(1,2,3-cd)pyrene	193-39-5	0.3 U	0.3	1	1
14239	Isophorone	78-59-1	1 U	1	3	1
14239	2-Methylnaphthalene	91-57-6	0.3 U	0.3	1	1
14239	2-Methylphenol	95-48-7	1 U	1	3	1
14239	4-Methylphenol	106-44-5	1 U	1	3	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
14239	Naphthalene	91-20-3	0.3 U	0.3	1	1
14239	1-Naphthylamine	134-32-7	13 U	13	38	1
14239	2-Naphthylamine	91-59-8	13 U	13	38	1
14239	2-Nitroaniline	88-74-4	1 U	1	3	1
14239	3-Nitroaniline	99-09-2	1 U	1	3	1
14239	4-Nitroaniline	100-01-6	1 U	1	3	1
14239	Nitrobenzene	98-95-3	1 U	1	3	1
14239	2-Nitrophenol	88-75-5	1 U	1	3	1
14239	4-Nitrophenol	100-02-7	25 U	25	76	1
14239	N-Nitrosodimethylamine	62-75-9	5 U	5	13	1
14239	N-Nitroso-di-n-propylamine	621-64-7	1 U	1	3	1
14239	N-Nitrosodiphenylamine	86-30-6	1 U	1	3	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
14239	Di-n-octylphthalate	117-84-0	5 U	5	13	1
14239	Parathion	56-38-2	5 U	5	13	1
14239	Pentachlorobenzene	608-93-5	1 U	1	3	1
14239	Pentachlorophenol	87-86-5	3 U	3	13	1
14239	Phenanthrene	85-01-8	0.3 U	0.3	1	1
14239	Phenol	108-95-2	1 U	1	3	1

*=This limit was used in the evaluation of the final result

Sample Description: CWKDERIVER-EQBLK-6 Blank Water
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: WW 9304794
ELLE Group #: 1872396
Matrix: Blank Water

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 09:30

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	SW-846 8270C		ug/l	ug/l	ug/l	
14239	Pyrene	129-00-0	0.3 U	0.3	1	1
14239	2,3,4,6-Tetrachlorophenol	58-90-2	1 U	1	3	1
14239	o-Toluidine	95-53-4	1 U	1	3	1
14239	1,2,4-Trichlorobenzene	120-82-1	1 U	1	3	1
14239	2,4,5-Trichlorophenol	95-95-4	1 U	1	3	1
14239	2,4,6-Trichlorophenol	88-06-2	1 U	1	3	1

The project QA/QC requirements were not met.

Project defined QC acceptance limits are not met. All QC is compliant with the laboratory statistically generated limits.

The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. Since the recovery is high and the target analyte(s) was not detected in the sample, the data is reported.

Z=The response for a target analyte(s) in the initial calibration verification standard is outside the QC acceptance limits. Since the response is high indicating increased sensitivity, and the target analyte(s) is not detected in the sample, the data is reported.

Reporting limits were raised due to limited sample volume.

00886 SVOA Library Search - 25

The results from the semivolatile library search are listed on the attached FORM 1 - SV-TIC. The qualifiers appearing in the "Q" column are defined at the end of the report.

Metals	SW-846 6010B	mg/l	mg/l	mg/l	
01743	Aluminum	7429-90-5	0.0894 U	0.0894	0.200
The NJ DKQP analyte list requirement was not met for Metals. The client specified list is reported.					
01750	Calcium	7440-70-2	0.0606 J	0.0600	0.200
01754	Iron	7439-89-6	0.0805 U	0.0805	0.200
01757	Magnesium	7439-95-4	0.0374 U	0.0374	0.100
01762	Potassium	7440-09-7	0.179 U	0.179	0.500
01767	Sodium	7440-23-5	0.321 U	0.321	1.00
07072	Zinc	7440-66-6	0.0065 U	0.0065	0.0200

	SW-846 6020	mg/l	mg/l	mg/l	
06024	Antimony	7440-36-0	0.00045 U	0.00045	0.0010
06025	Arsenic	7440-38-2	0.00072 U	0.00072	0.0020
06026	Barium	7440-39-3	0.00072 U	0.00072	0.0020
06027	Beryllium	7440-41-7	0.000071 U	0.000071	0.00050
06028	Cadmium	7440-43-9	0.00015 U	0.00015	0.00050
06031	Chromium	7440-47-3	0.00087 U	0.00087	0.0020

*=This limit was used in the evaluation of the final result

Sample Description: CWKDERIVER-EQBLK-6 Blank Water
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: WW 9304794
ELLE Group #: 1872396
Matrix: Blank Water

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 09:30

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
Metals	SW-846 6020		mg/l	mg/l	mg/l	
06032	Cobalt	7440-48-4	0.00016 U	0.00016	0.00050	1
06033	Copper	7440-50-8	0.00055 J	0.00054	0.0020	1
06035	Lead	7439-92-1	0.00011 U	0.00011	0.0010	1
06037	Manganese	7439-96-5	0.00090 U	0.00090	0.0020	1
06039	Nickel	7440-02-0	0.0010 U	0.0010	0.0020	1
06041	Selenium	7782-49-2	0.00050 U	0.00050	0.0020	1
06042	Silver	7440-22-4	0.00015 U	0.00015	0.00050	1
06045	Thallium	7440-28-0	0.00012 U	0.00012	0.00050	1
06048	Vanadium	7440-62-2	0.00063	0.00021	0.00050	1

The NJ DKQP analyte list requirement was not met for metals. The client specified list is reported.

	SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	0.000050 U	0.000050	0.00020

	SW-846 9060A	mg/l	mg/l	mg/l	
00354	Total Organic Carbon (Quad)	n.a.	0.50 U	0.50	1.0

The reported result is the average of the following trials:

0 mg/l
0.008 mg/l
0.009 mg/l
0 mg/l

Sample Comments

State of New Jersey Lab Certification No. PA011

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	TCL Volatiles + Add'l Cmpds	SW-846 8260B	1	Y173182AA	11/15/2017 00:39	Don V Viray	1
13066	Freons	SW-846 8260FRN Modified	1	J173201AA	11/16/2017 13:23	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Y173182AA	11/15/2017 00:39	Don V Viray	1
14239	TCL SVOAs + Add'l Cmpds	SW-846 8270C	1	17313WAN026	11/17/2017 12:01	Kira N Klaassen	1
10464	BNA Water Extraction (App IX)	SW-846 3510C	1	17313WAN026	11/09/2017 20:35	Kate E Lutte	1
01743	Aluminum	SW-846 6010B	1	173120570502	11/15/2017 03:41	Scott R Yanos	1
01750	Calcium	SW-846 6010B	1	173120570502	11/12/2017 16:13	Elaine F Stoltzfus	1
01754	Iron	SW-846 6010B	1	173120570502	11/12/2017 16:13	Elaine F Stoltzfus	1
01757	Magnesium	SW-846 6010B	1	173120570502	11/12/2017 16:13	Elaine F Stoltzfus	1
01762	Potassium	SW-846 6010B	1	173120570502	11/12/2017 16:13	Elaine F Stoltzfus	1
01767	Sodium	SW-846 6010B	1	173120570502	11/12/2017 16:13	Elaine F Stoltzfus	1
07072	Zinc	SW-846 6010B	1	173120570502	11/12/2017 16:13	Elaine F Stoltzfus	1

*=This limit was used in the evaluation of the final result

Sample Description: CWKDERIVER-EQBLK-6 Blank Water
DE RIVER NAPL DELINEATION PHASE III**CRG-The Chemours Co. FC, LLC**
ELLE Sample #: WW 9304794
ELLE Group #: 1872396
Matrix: Blank Water**Project Name:** CWK - DE RIVER NAPL DELINEATION PHASE IIISubmittal Date/Time: 11/07/2017 19:15
Collection Date/Time: 11/07/2017 09:30**Laboratory Sample Analysis Record**

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06024	Antimony	SW-846 6020	1	173120605006A	11/15/2017 12:26	Choon Y Tian	1
06025	Arsenic	SW-846 6020	1	173120605006A	11/15/2017 12:26	Choon Y Tian	1
06026	Barium	SW-846 6020	1	173120605006D	11/15/2017 12:26	Choon Y Tian	1
06027	Beryllium	SW-846 6020	1	173120605006A	11/15/2017 12:26	Choon Y Tian	1
06028	Cadmium	SW-846 6020	1	173120605006A	11/15/2017 12:26	Choon Y Tian	1
06031	Chromium	SW-846 6020	1	173120605006A	11/15/2017 12:26	Choon Y Tian	1
06032	Cobalt	SW-846 6020	1	173120605006A	11/15/2017 12:26	Choon Y Tian	1
06033	Copper	SW-846 6020	1	173120605006A	11/15/2017 12:26	Choon Y Tian	1
06035	Lead	SW-846 6020	1	173120605006A	11/15/2017 12:26	Choon Y Tian	1
06037	Manganese	SW-846 6020	1	173120605006A	11/17/2017 05:00	Sarah L Burt	1
06039	Nickel	SW-846 6020	1	173120605006A	11/15/2017 12:26	Choon Y Tian	1
06041	Selenium	SW-846 6020	1	173120605006B	11/15/2017 12:26	Choon Y Tian	1
06042	Silver	SW-846 6020	1	173120605006A	11/15/2017 12:26	Choon Y Tian	1
06045	Thallium	SW-846 6020	1	173120605006A	11/15/2017 12:26	Choon Y Tian	1
06048	Vanadium	SW-846 6020	1	173120605006A	11/15/2017 12:26	Choon Y Tian	1
00259	Mercury	SW-846 7470A	1	173130571303	11/13/2017 06:53	Damary Valentin	1
05705	ICP-WW/TL, 3010A (tot) - U3	SW-846 3010A	1	173120570502	11/09/2017 15:35	JoElla L Rice	1
06050	ICPMS-Water, 3020A - U3	SW-846 3020A	1	173120605006	11/09/2017 06:55	Lisa J Cooke	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	173130571303	11/10/2017 19:45	JoElla L Rice	1
00354	Total Organic Carbon (Quad)	SW-846 9060A	1	17317667604A	11/14/2017 00:22	Drew M Gerhart	1

*=This limit was used in the evaluation of the final result

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1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

! _____ !
! DR-15 !

Lab Name: Lancaster Laboratories Contract: _____
Lab Code: LANCAS Case No.: SAS No.: SDG No.:
Matrix: (soil/water) WATER Lab Sample ID: 9304794
Sample wt/vol: 5.0 (g/mL) mL Lab File ID: HP09355.i/17nov14b.b/yn14s52.d
Level: (low/med) LOW Date Received: 11/07/17
% Moisture: not dec. Date Analyzed: 11/15/17
Column: (pack/cap) CAP Dilution Factor: 1.0
Number TICs found: 0 CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. VOCTIC	Total VOC TICs		0	U
2.				
3.				
4.				
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page 1 of 1

FORM I VOA-TIC

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1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

! _____ !
! DR-15 !

Lab Name: Lancaster Laboratories Contract: _____
 Lab Code: LANCAS Case No.: _____ SAS No.: _____ SDG No.: _____
 Matrix: (soil/water) WATER Lab Sample ID: 9304794
 Sample wt/vol: 99 (g/mL) mL Lab File ID: jk0846.d
 Level: (low/med) LOW Date Received: 11/07/17
 % Moisture: Decanted: (Y/N) Date Extracted: 11/09/17
 Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/17/17
 Injection Volume: 0.5 (uL) Dilution Factor: 1
 GPC Cleanup: N pH: Extraction: Sepf

CONCENTRATION UNITS:

Number TICs found: 2 (ug/L or ug/Kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	!Unknown	4.016	14	J
2.	!Unknown	18.210	50	J
3.	!			
4.SVOCTIC	!Total SVOC TICs		64	J
5.	!			
6.	!			
7.	!			
8.	!			
9.	!			
10.	!			
11.	!			
12.	!			
13.	!			
14.	!			
15.	!			
16.	!			
17.	!			
18.	!			
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20.	!			
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30.	!			

page 1 of 1

FORM I SV-1

Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC

Group Number: 1872396

Reported: 12/18/2017 11:00

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Method Blank

Analysis Name	Result ug/kg	MDL** ug/kg	LOQ ug/kg
Batch number: A173212AA			
Acetone	7 U	7	20
Benzene	0.5 U	0.5	5
Bromodichloromethane	1 U	1	5
2-Butanone	4 U	4	10
n-Butylbenzene	1 U	1	5
sec-Butylbenzene	1 U	1	5
tert-Butylbenzene	1 U	1	5
Carbon Disulfide	1 U	1	5
Carbon Tetrachloride	1 U	1	5
Chlorobenzene	1 U	1	5
Chloroethane	2 U	2	5
Chloroform	1 U	1	5
Chloromethane	2 U	2	5
2-Chlorotoluene	1 U	1	5
4-Chlorotoluene	1 U	1	5
Chlorotrifluoroethene	2 U	2	5
Dibromochloromethane	1 U	1	5
1,2-Dibromoethane	1 U	1	5
1,2-Dichlorobenzene	1 U	1	5
1,3-Dichlorobenzene	1 U	1	5
1,4-Dichlorobenzene	1 U	1	5
Dichlorodifluoromethane	2 U	2	5
1,1-Dichloroethane	1 U	1	5
1,2-Dichloroethane	1 U	1	5
1,1-Dichloroethene	1 U	1	5
cis-1,2-Dichloroethene	1 U	1	5
trans-1,2-Dichloroethene	1 U	1	5
1,2-Dichloroethene (Total)	1 U	1	5
Dichlorofluoromethane	2 U	2	5
1,2-Dichloropropane	1 U	1	5
1,1-Dichloropropene	1 U	1	5
cis-1,3-Dichloropropene	1 U	1	5
Ethylbenzene	1 U	1	5
Freon 113	2 U	2	10
Freon 133a	2 U	2	5
n-Hexane	1 U	1	5
2-Hexanone	3 U	3	10
Isobutyl Alcohol	100 U	100	250
Isopropylbenzene	1 U	1	5

*- Outside of specification

**-This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control SummaryClient Name: CRG-The Chemours Co. FC, LLC
Reported: 12/18/2017 11:00

Group Number: 1872396

Method Blank (continued)

Analysis Name	Result ug/kg	MDL** ug/kg	LOQ ug/kg
p-Isopropyltoluene	1 U	1	5
Methacrylonitrile	5 U	5	50
Methyl Methacrylate	1 U	1	5
Methyl Tertiary Butyl Ether	0.5 U	0.5	5
4-Methyl-2-pentanone	3 U	3	10
Methylene Chloride	2 U	2	5
Propionitrile	30 U	30	100
n-Propylbenzene	1 U	1	5
Styrene	1 U	1	5
1,1,1,2-Tetrachloroethane	1 U	1	5
1,1,2,2-Tetrachloroethane	1 U	1	5
Tetrachloroethene	1 U	1	5
Tetrahydrofuran	4 U	4	8
Toluene	1 U	1	5
1,1,1-Trichloroethane	1 U	1	5
1,1,2-Trichloroethane	1 U	1	5
Trichloroethene	1 U	1	5
Trichlorofluoromethane	2 U	2	5
1,2,4-Trimethylbenzene	1 U	1	5
1,3,5-Trimethylbenzene	1 U	1	5
Vinyl Chloride	1 U	1	5
m+p-Xylene	1 U	1	5
o-Xylene	1 U	1	5
Xylene (Total)	1 U	1	5
Batch number: J173191AA	Sample number(s): 9304777,9304782-9304784		
Chlorodifluoroethane	1 U	1	5
Chlorodifluoromethane	2 U	2	5
Chlorofluoromethane	1 U	1	5
Chloropentafluoroethane	15 U	15	50
1,1-Dichloro-1-fluoroethane	1 U	1	5
1,2-Dichloro-1-fluoroethane	1 U	1	5
Dichlorotetrafluoroethane	2 U	2	5
1,2-Dichlorotrifluoroethane	1 U	1	5
Dichlorotrifluoroethane	1 U	1	5
Fluoromethane	3 U	3	10
Freon 113a	5 U	5	20
1,1,2-Trifluoroethane	2 U	2	5
Vinyl fluoride	6 U	6	20
Batch number: J173211AA	Sample number(s): 9304778-9304780,9304786-9304792		
Chlorodifluoroethane	1 U	1	5
Chlorodifluoromethane	2 U	2	5
Chlorofluoromethane	1 U	1	5
Chloropentafluoroethane	15 U	15	50
1,1-Dichloro-1-fluoroethane	1 U	1	5

*- Outside of specification

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Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/18/2017 11:00

Group Number: 1872396

Method Blank (continued)

Analysis Name	Result ug/kg	MDL** ug/kg	LOQ ug/kg
1,2-Dichloro-1-fluoroethane	1 U	1	5
Dichlorotetrafluoroethane	2 U	2	5
1,2-Dichlorotrifluoroethane	1 U	1	5
Dichlorotrifluoroethane	1 U	1	5
Fluoromethane	3 U	3	10
Freon 113a	5 U	5	20
1,1,2-Trifluoroethane	2 U	2	5
Vinyl fluoride	6 U	6	20
Batch number: J173251AA	Sample number(s): 9304785		
Chlorodifluoroethane	1 U	1	5
Chlorodifluoromethane	2 U	2	5
Chlorofluoromethane	1 U	1	5
Chloropentafluoroethane	15 U	15	50
1,1-Dichloro-1-fluoroethane	1 U	1	5
1,2-Dichloro-1-fluoroethane	1 U	1	5
Dichlorotetrafluoroethane	2 U	2	5
1,2-Dichlorotrifluoroethane	1 U	1	5
Dichlorotrifluoroethane	1 U	1	5
Fluoromethane	3 U	3	10
Freon 113a	5 U	5	20
1,1,2-Trifluoroethane	2 U	2	5
Vinyl fluoride	6 U	6	20
Batch number: R173182AA	Sample number(s): 9304778-9304780,9304787		
Acetone	350 U	350	1,000
Benzene	25 U	25	250
Bromodichloromethane	50 U	50	250
2-Butanone	200 U	200	500
n-Butylbenzene	50 U	50	250
sec-Butylbenzene	50 U	50	250
tert-Butylbenzene	50 U	50	250
Carbon Disulfide	50 U	50	250
Carbon Tetrachloride	50 U	50	250
Chlorobenzene	50 U	50	250
Chloroethane	100 U	100	250
Chloroform	50 U	50	250
Chloromethane	100 U	100	250
2-Chlorotoluene	50 U	50	250
4-Chlorotoluene	50 U	50	250
Chlorotrifluoroethene	100 U	100	250
Dibromochloromethane	50 U	50	250
1,2-Dibromoethane	50 U	50	250
1,2-Dichlorobenzene	50 U	50	250
1,3-Dichlorobenzene	50 U	50	250
1,4-Dichlorobenzene	50 U	50	250

*- Outside of specification

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Quality Control SummaryClient Name: CRG-The Chemours Co. FC, LLC
Reported: 12/18/2017 11:00

Group Number: 1872396

Method Blank (continued)

Analysis Name	Result ug/kg	MDL** ug/kg	LOQ ug/kg
Dichlorodifluoromethane	100 U	100	250
1,1-Dichloroethane	50 U	50	250
1,2-Dichloroethane	50 U	50	250
1,1-Dichloroethene	50 U	50	250
cis-1,2-Dichloroethene	50 U	50	250
trans-1,2-Dichloroethene	50 U	50	250
1,2-Dichloroethene (Total)	50 U	50	250
Dichlorofluoromethane	100 U	100	250
1,2-Dichloropropane	50 U	50	250
1,1-Dichloropropene	50 U	50	250
cis-1,3-Dichloropropene	50 U	50	250
Ethylbenzene	50 U	50	250
Freon 113	100 U	100	500
Freon 133a	100 U	100	250
n-Hexane	50 U	50	250
2-Hexanone	150 U	150	500
Isobutyl Alcohol	5,000 U	5,000	13,000
Isopropylbenzene	50 U	50	250
p-Isopropyltoluene	50 U	50	250
Methacrylonitrile	250 U	250	2,500
Methyl Methacrylate	50 U	50	250
Methyl Tertiary Butyl Ether	25 U	25	250
4-Methyl-2-pentanone	150 U	150	500
Methylene Chloride	100 U	100	250
Propionitrile	1,500 U	1,500	5,000
n-Propylbenzene	50 U	50	250
Styrene	50 U	50	250
1,1,1,2-Tetrachloroethane	50 U	50	250
1,1,2,2-Tetrachloroethane	50 U	50	250
Tetrachloroethene	50 U	50	250
Tetrahydrofuran	200 U	200	400
Toluene	50 U	50	250
1,1,1-Trichloroethane	50 U	50	250
1,1,2-Trichloroethane	50 U	50	250
Trichloroethene	50 U	50	250
Trichlorofluoromethane	100 U	100	250
1,2,4-Trimethylbenzene	50 U	50	250
1,3,5-Trimethylbenzene	50 U	50	250
Vinyl Chloride	50 U	50	250
m+p-Xylene	50 U	50	250
o-Xylene	50 U	50	250
Xylene (Total)	50 U	50	250

Batch number: X173182AA
AcetoneSample number(s): 9304782-9304786,9304788-9304792
7 U 7 20

*- Outside of specification

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Quality Control SummaryClient Name: CRG-The Chemours Co. FC, LLC
Reported: 12/18/2017 11:00

Group Number: 1872396

Method Blank (continued)

Analysis Name	Result ug/kg	MDL** ug/kg	LOQ ug/kg
Benzene	0.5 U	0.5	5
Bromodichloromethane	1 U	1	5
2-Butanone	4 U	4	10
n-Butylbenzene	1 U	1	5
sec-Butylbenzene	1 U	1	5
tert-Butylbenzene	1 U	1	5
Carbon Disulfide	1 U	1	5
Carbon Tetrachloride	1 U	1	5
Chlorobenzene	1 U	1	5
Chloroethane	2 U	2	5
Chloroform	1 U	1	5
Chloromethane	2 U	2	5
2-Chlorotoluene	1 U	1	5
4-Chlorotoluene	1 U	1	5
Chlorotrifluoroethylene	2 U	2	5
Dibromochloromethane	1 U	1	5
1,2-Dibromoethane	1 U	1	5
1,2-Dichlorobenzene	1 U	1	5
1,3-Dichlorobenzene	1 U	1	5
1,4-Dichlorobenzene	1 U	1	5
Dichlorodifluoromethane	2 U	2	5
1,1-Dichloroethane	1 U	1	5
1,2-Dichloroethane	1 U	1	5
1,1-Dichloroethene	1 U	1	5
cis-1,2-Dichloroethene	1 U	1	5
trans-1,2-Dichloroethene	1 U	1	5
1,2-Dichloroethene (Total)	1 U	1	5
Dichlorofluoromethane	2 U	2	5
1,2-Dichloropropane	1 U	1	5
1,1-Dichloropropene	1 U	1	5
cis-1,3-Dichloropropene	1 U	1	5
Ethylbenzene	1 U	1	5
Freon 113	2 U	2	10
Freon 133a	2 U	2	5
n-Hexane	1 U	1	5
2-Hexanone	3 U	3	10
Isobutyl Alcohol	100 U	100	250
Isopropylbenzene	1 U	1	5
p-Isopropyltoluene	1 U	1	5
Methacrylonitrile	5 U	5	50
Methyl Methacrylate	1 U	1	5
Methyl Tertiary Butyl Ether	0.5 U	0.5	5
4-Methyl-2-pentanone	3 U	3	10
Methylene Chloride	2 U	2	5
Propionitrile	30 U	30	100

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Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/18/2017 11:00

Group Number: 1872396

Method Blank (continued)

Analysis Name	Result ug/kg	MDL**	LOQ
		ug/kg	ug/kg
n-Propylbenzene	1 U	1	5
Styrene	1 U	1	5
1,1,1,2-Tetrachloroethane	1 U	1	5
1,1,2,2-Tetrachloroethane	1 U	1	5
Tetrachloroethene	1 U	1	5
Tetrahydrofuran	4 U	4	8
Toluene	1 U	1	5
1,1,1-Trichloroethane	1 U	1	5
1,1,2-Trichloroethane	1 U	1	5
Trichloroethene	1 U	1	5
Trichlorofluoromethane	2 U	2	5
1,2,4-Trimethylbenzene	1 U	1	5
1,3,5-Trimethylbenzene	1 U	1	5
Vinyl Chloride	1 U	1	5
m+p-Xylene	1 U	1	5
o-Xylene	1 U	1	5
Xylene (Total)	1 U	1	5
		ug/l	ug/l
		ug/l	ug/l
Batch number: J173201AA	Sample number(s): 9304793-9304794		
Chlorodifluoroethane	1 U	1	5
Chlorodifluoromethane	2 U	2	5
Chlorofluoromethane	1 U	1	5
Chloropentafluoroethane	15 U	15	50
1,1-Dichloro-1-fluoroethane	1 U	1	5
1,2-Dichloro-1-fluoroethane	1 U	1	5
Dichlorotetrafluoroethane	2 U	2	5
1,2-Dichlorotrifluoroethane	1 U	1	5
Dichlorotrifluoroethane	1 U	1	5
Fluoromethane	3 U	3	10
Freon 113a	5 U	5	20
1,1,2-Trifluoroethane	2 U	2	5
Vinyl fluoride	2 U	2	10
Batch number: Y173182AA	Sample number(s): 9304793-9304794		
Acetone	6 U	6	20
Benzene	0.5 U	0.5	1
Bromodichloromethane	0.5 U	0.5	1
2-Butanone	3 U	3	10
n-Butylbenzene	1 U	1	5
sec-Butylbenzene	1 U	1	5
tert-Butylbenzene	1 U	1	5
Carbon Disulfide	1 U	1	5
Carbon Tetrachloride	0.5 U	0.5	1
Chlorobenzene	0.5 U	0.5	1
Chloroethane	0.5 U	0.5	1

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Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/18/2017 11:00

Group Number: 1872396

Method Blank (continued)

Analysis Name	Result ug/l	MDL**	LOQ
		ug/l	ug/l
Chloroform	0.5 U	0.5	1
Chloromethane	0.5 U	0.5	1
2-Chlorotoluene	1 U	1	5
4-Chlorotoluene	1 U	1	5
Chlorotrifluoroethene	2 U	2	5
Dibromochloromethane	0.5 U	0.5	1
1,2-Dibromoethane	0.5 U	0.5	1
1,2-Dichlorobenzene	1 U	1	5
1,3-Dichlorobenzene	1 U	1	5
1,4-Dichlorobenzene	1 U	1	5
Dichlorodifluoromethane	0.5 U	0.5	1
1,1-Dichloroethane	0.5 U	0.5	1
1,2-Dichloroethane	0.5 U	0.5	1
1,1-Dichloroethene	0.5 U	0.5	1
cis-1,2-Dichloroethene	0.5 U	0.5	1
trans-1,2-Dichloroethene	0.5 U	0.5	1
1,2-Dichloroethene (Total)	0.5 U	0.5	1
Dichlorofluoromethane	0.5 U	0.5	1
1,2-Dichloropropane	0.5 U	0.5	1
1,1-Dichloropropene	1 U	1	5
cis-1,3-Dichloropropene	0.5 U	0.5	1
Ethylbenzene	0.5 U	0.5	1
Freon 113	2 U	2	10
Freon 133a	2 U	2	5
n-Hexane	2 U	2	5
2-Hexanone	3 U	3	10
Isobutyl Alcohol	100 U	100	250
Isopropylbenzene	1 U	1	5
p-Isopropyltoluene	1 U	1	5
Methacrylonitrile	10 U	10	50
Methyl Methacrylate	1 U	1	5
Methyl Tertiary Butyl Ether	0.5 U	0.5	1
4-Methyl-2-pentanone	3 U	3	10
Methylene Chloride	0.5 U	0.5	1
Propionitrile	30 U	30	100
n-Propylbenzene	1 U	1	5
Styrene	1 U	1	5
1,1,1,2-Tetrachloroethane	0.5 U	0.5	1
1,1,2,2-Tetrachloroethane	0.5 U	0.5	1
Tetrachloroethene	0.5 U	0.5	1
Tetrahydrofuran	4 U	4	10
Toluene	0.5 U	0.5	1
1,1,1-Trichloroethane	0.5 U	0.5	1
1,1,2-Trichloroethane	0.5 U	0.5	1
Trichloroethene	0.5 U	0.5	1

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Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC

Group Number: 1872396

Reported: 12/18/2017 11:00

Method Blank (continued)

Analysis Name	Result		MDL** ug/l	LOQ ug/l
	ug/l	ug/l		
Trichlorofluoromethane	0.5	U	0.5	1
1,2,4-Trimethylbenzene	1	U	1	5
1,3,5-Trimethylbenzene	1	U	1	5
Vinyl Chloride	0.5	U	0.5	1
m+p-Xylene	0.5	U	0.5	1
o-Xylene	0.5	U	0.5	1
Xylene (Total)	0.5	U	0.5	1
		ug/kg	ug/kg	ug/kg
Batch number: 17314SLH026	Sample number(s): 9304777			
Acenaphthene	3	U	3	17
Acenaphthylene	3	U	3	17
Acetophenone	17	U	17	33
4-Aminobiphenyl	170	U	170	500
Aniline	170	U	170	500
Anthracene	3	U	3	17
Benzidine	250	U	250	500
Benzo(a)anthracene	3	U	3	17
Benzo(a)pyrene	3	U	3	17
Benzo(b)fluoranthene	3	U	3	17
Benzo(g,h,i)perylene	3	U	3	17
Benzo(k)fluoranthene	3	U	3	17
1,1'-Biphenyl	17	U	17	33
4-Bromophenyl-phenylether	17	U	17	33
Butylbenzylphthalate	67	U	67	170
Di-n-butylphthalate	67	U	67	170
Carbazole	17	U	17	33
4-Chloro-3-methylphenol	17	U	17	33
4-Chloroaniline	33	U	33	67
bis(2-Chloroethoxy)methane	17	U	17	33
bis(2-Chloroethyl)ether	17	U	17	33
2-Chloronaphthalene	7	U	7	33
2-Chlorophenol	17	U	17	33
4-Chlorophenyl-phenylether	17	U	17	33
2,2'-oxybis(1-Chloropropane)	17	U	17	33
Chrysene	3	U	3	17
Dibenz(a,h)anthracene	3	U	3	17
Dibenzofuran	17	U	17	33
3,3'-Dichlorobenzidine	100	U	100	330
2,4-Dichlorophenol	17	U	17	33
Diethylphthalate	67	U	67	170
2,4-Dimethylphenol	17	U	17	33
Dimethylphthalate	67	U	67	170
4,6-Dinitro-2-methylphenol	170	U	170	500
2,4-Dinitrophenol	300	U	300	1,000

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Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/18/2017 11:00

Group Number: 1872396

Method Blank (continued)

Analysis Name	Result ug/kg	MDL**	LOQ
		ug/kg	ug/kg
2,4-Dinitrotoluene	67 U	67	170
2,6-Dinitrotoluene	17 U	17	33
1,4-Dioxane	100 U	100	330
Diphenyl ether	17 U	17	33
1,2-Diphenylhydrazine	17 U	17	33
bis(2-Ethylhexyl)phthalate	67 U	67	170
Fluoranthene	3 U	3	17
Fluorene	3 U	3	17
Hexachlorobenzene	3 U	3	17
Hexachlorobutadiene	17 U	17	33
Hexachlorocyclopentadiene	170 U	170	500
Hexachloroethane	33 U	33	170
Indeno(1,2,3-cd)pyrene	3 U	3	17
Isophorone	17 U	17	33
2-Methylnaphthalene	3 U	3	17
2-Methylphenol	17 U	17	33
4-Methylphenol	17 U	17	33
Naphthalene	3 U	3	17
1-Naphthylamine	170 U	170	500
2-Naphthylamine	170 U	170	500
2-Nitroaniline	17 U	17	33
3-Nitroaniline	67 U	67	170
4-Nitroaniline	67 U	67	170
Nitrobenzene	17 U	17	33
2-Nitrophenol	17 U	17	33
4-Nitrophenol	170 U	170	500
N-Nitrosodimethylamine	67 U	67	170
N-Nitroso-di-n-propylamine	17 U	17	33
N-Nitrosodiphenylamine	17 U	17	33
Di-n-octylphthalate	67 U	67	170
Parathion	170 U	170	500
Pentachlorobenzene	17 U	17	33
Pentachlorophenol	33 U	33	170
Phenanthrene	3 U	3	17
Phenol	17 U	17	33
Pyrene	3 U	3	17
2,3,4,6-Tetrachlorophenol	67 U	67	170
o-Toluidine	200 U	200	670
1,2,4-Trichlorobenzene	17 U	17	33
2,4,5-Trichlorophenol	17 U	17	33
2,4,6-Trichlorophenol	17 U	17	33

Batch number: 17317SLE026

Sample number(s): 9304778-9304780,9304782-9304792

Acenaphthene

3 U 3 17

Acenaphthylene

3 U 3 17

*- Outside of specification

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Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/18/2017 11:00

Group Number: 1872396

Method Blank (continued)

Analysis Name	Result ug/kg	MDL**	LOQ
		ug/kg	ug/kg
Acetophenone	17 U	17	33
4-Aminobiphenyl	170 U	170	500
Aniline	170 U	170	500
Anthracene	3 U	3	17
Benzidine	250 U	250	500
Benzo(a)anthracene	3 U	3	17
Benzo(a)pyrene	3 U	3	17
Benzo(b)fluoranthene	3 U	3	17
Benzo(g,h,i)perylene	3 U	3	17
Benzo(k)fluoranthene	3 U	3	17
1,1'-Biphenyl	17 U	17	33
4-Bromophenyl-phenylether	17 U	17	33
Butylbenzylphthalate	67 U	67	170
Di-n-butylphthalate	67 U	67	170
Carbazole	17 U	17	33
4-Chloro-3-methylphenol	17 U	17	33
4-Chloroaniline	33 U	33	67
bis(2-Chloroethoxy)methane	17 U	17	33
bis(2-Chloroethyl)ether	17 U	17	33
2-Chloronaphthalene	7 U	7	33
2-Chlorophenol	17 U	17	33
4-Chlorophenyl-phenylether	17 U	17	33
2,2'-oxybis(1-Chloropropane)	17 U	17	33
Chrysene	3 U	3	17
Dibenz(a,h)anthracene	3 U	3	17
Dibenzofuran	17 U	17	33
3,3'-Dichlorobenzidine	100 U	100	330
2,4-Dichlorophenol	17 U	17	33
Diethylphthalate	67 U	67	170
2,4-Dimethylphenol	17 U	17	33
Dimethylphthalate	67 U	67	170
4,6-Dinitro-2-methylphenol	170 U	170	500
2,4-Dinitrophenol	300 U	300	1,000
2,4-Dinitrotoluene	67 U	67	170
2,6-Dinitrotoluene	17 U	17	33
1,4-Dioxane	100 U	100	330
Diphenyl ether	17 U	17	33
1,2-Diphenylhydrazine	17 U	17	33
bis(2-Ethylhexyl)phthalate	67 U	67	170
Fluoranthene	3 U	3	17
Fluorene	3 U	3	17
Hexachlorobenzene	3 U	3	17
Hexachlorobutadiene	17 U	17	33
Hexachlorocyclopentadiene	170 U	170	500
Hexachloroethane	33 U	33	170

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Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/18/2017 11:00

Group Number: 1872396

Method Blank (continued)

Analysis Name	Result ug/kg	MDL**	LOQ
		ug/kg	ug/kg
Indeno(1,2,3-cd)pyrene	3 U	3	17
Isophorone	17 U	17	33
2-Methylnaphthalene	3 U	3	17
2-Methylphenol	17 U	17	33
4-Methylphenol	17 U	17	33
Naphthalene	3 U	3	17
1-Naphthylamine	170 U	170	500
2-Naphthylamine	170 U	170	500
2-Nitroaniline	17 U	17	33
3-Nitroaniline	67 U	67	170
4-Nitroaniline	67 U	67	170
Nitrobenzene	17 U	17	33
2-Nitrophenol	17 U	17	33
4-Nitrophenol	170 U	170	500
N-Nitrosodimethylamine	67 U	67	170
N-Nitroso-di-n-propylamine	17 U	17	33
N-Nitrosodiphenylamine	17 U	17	33
Di-n-octylphthalate	67 U	67	170
Parathion	170 U	170	500
Pentachlorobenzene	17 U	17	33
Pentachlorophenol	33 U	33	170
Phenanthrene	3 U	3	17
Phenol	17 U	17	33
Pyrene	3 U	3	17
2,3,4,6-Tetrachlorophenol	67 U	67	170
o-Toluidine	200 U	200	670
1,2,4-Trichlorobenzene	17 U	17	33
2,4,5-Trichlorophenol	17 U	17	33
2,4,6-Trichlorophenol	17 U	17	33
		ug/l	ug/l
Batch number: 17313WAN026	Sample number(s): 9304794		
Acenaphthene	0.1 U	0.1	0.5
Acenaphthylene	0.1 U	0.1	0.5
Acetophenone	0.5 U	0.5	1
4-Aminobiphenyl	0.5 U	0.5	1
Aniline	0.5 U	0.5	1
Anthracene	0.1 U	0.1	0.5
Benzidine	20 U	20	60
Benzo(a)anthracene	0.1 U	0.1	0.5
Benzo(a)pyrene	0.1 U	0.1	0.5
Benzo(b)fluoranthene	0.1 U	0.1	0.5
Benzo(g,h,i)perylene	0.1 U	0.1	0.5
Benzo(k)fluoranthene	0.1 U	0.1	0.5
1,1'-Biphenyl	0.5 U	0.5	1

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Quality Control SummaryClient Name: CRG-The Chemours Co. FC, LLC
Reported: 12/18/2017 11:00

Group Number: 1872396

Method Blank (continued)

Analysis Name	Result ug/l	MDL** ug/l	LOQ ug/l
4-Bromophenyl-phenylether	0.5 U	0.5	1
Butylbenzylphthalate	2 U	2	5
Di-n-butylphthalate	2 U	2	5
Carbazole	0.5 U	0.5	1
4-Chloro-3-methylphenol	0.5 U	0.5	1
4-Chloroaniline	2 U	2	4
bis(2-Chloroethoxy)methane	0.5 U	0.5	1
bis(2-Chloroethyl)ether	0.5 U	0.5	1
2-Chloronaphthalene	0.4 U	0.4	1
2-Chlorophenol	0.5 U	0.5	1
4-Chlorophenyl-phenylether	0.5 U	0.5	1
2,2'-oxybis(1-Chloropropane)	0.5 U	0.5	1
Chrysene	0.1 U	0.1	0.5
Dibenz(a,h)anthracene	0.1 U	0.1	0.5
Dibenzo furan	0.5 U	0.5	1
3,3'-Dichlorobenzidine	2 U	2	5
2,4-Dichlorophenol	0.5 U	0.5	1
Diethylphthalate	2 U	2	5
2,4-Dimethylphenol	0.5 U	0.5	1
Dimethylphthalate	2 U	2	5
4,6-Dinitro-2-methylphenol	5 U	5	15
2,4-Dinitrophenol	10 U	10	30
2,4-Dinitrotoluene	1 U	1	5
2,6-Dinitrotoluene	0.5 U	0.5	1
1,4-Dioxane	1 U	1	5
Diphenyl ether	0.5 U	0.5	1
1,2-Diphenylhydrazine	0.5 U	0.5	1
bis(2-Ethylhexyl)phthalate	2 U	2	5
Fluoranthene	0.1 U	0.1	0.5
Fluorene	0.1 U	0.1	0.5
Hexachlorobenzene	0.1 U	0.1	0.5
Hexachlorobutadiene	0.5 U	0.5	1
Hexachlorocyclopentadiene	5 U	5	15
Hexachloroethane	1 U	1	5
Indeno(1,2,3-cd)pyrene	0.1 U	0.1	0.5
Isophorone	0.5 U	0.5	1
2-Methylnaphthalene	0.1 U	0.1	0.5
2-Methylphenol	0.5 U	0.5	1
4-Methylphenol	0.5 U	0.5	1
Naphthalene	0.1 U	0.1	0.5
1-Naphthylamine	5 U	5	15
2-Naphthylamine	5 U	5	15
2-Nitroaniline	0.5 U	0.5	1
3-Nitroaniline	0.5 U	0.5	1
4-Nitroaniline	0.5 U	0.5	1

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Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/18/2017 11:00

Group Number: 1872396

Method Blank (continued)

Analysis Name	Result	MDL**	LOQ
	ug/l	ug/l	ug/l
Nitrobenzene	0.5 U	0.5	1
2-Nitrophenol	0.5 U	0.5	1
4-Nitrophenol	10 U	10	30
N-Nitrosodimethylamine	2 U	2	5
N-Nitroso-di-n-propylamine	0.5 U	0.5	1
N-Nitrosodiphenylamine	0.5 U	0.5	1
Di-n-octylphthalate	2 U	2	5
Parathion	2 U	2	5
Pentachlorobenzene	0.5 U	0.5	1
Pentachlorophenol	1 U	1	5
Phenanthrene	0.1 U	0.1	0.5
Phenol	0.5 U	0.5	1
Pyrene	0.1 U	0.1	0.5
2,3,4,6-Tetrachlorophenol	0.5 U	0.5	1
o-Toluidine	0.5 U	0.5	1
1,2,4-Trichlorobenzene	0.5 U	0.5	1
2,4,5-Trichlorophenol	0.5 U	0.5	1
2,4,6-Trichlorophenol	0.5 U	0.5	1
	mg/kg	mg/kg	mg/kg
Batch number: 173120570804	Sample number(s): 9304777-9304781,9304786-9304787,9304792		
Aluminum	8.94 U	8.94	20.0
Calcium	3.33 U	3.33	20.0
Iron	8.05 U	8.05	20.0
Magnesium	2.94 J	2.43	10.0
Potassium	16.7 U	16.7	50.0
Sodium	16.7 U	16.7	100
Zinc	0.286 J	0.240	2.00
Batch number: 173120570804A	Sample number(s): 9304777-9304781,9304786-9304787,9304792		
Antimony	0.0932 U	0.0932	0.200
Arsenic	0.128 U	0.128	0.400
Beryllium	0.0105 U	0.0105	0.100
Cadmium	0.0344 U	0.0344	0.100
Chromium	0.174 U	0.174	0.400
Cobalt	0.0312 U	0.0312	0.100
Copper	0.107 U	0.107	0.400
Lead	0.0302 J	0.0222	0.200
Manganese	0.181 U	0.181	0.400
Nickel	0.199 U	0.199	0.400
Silver	0.0292 U	0.0292	0.100
Thallium	0.0250 U	0.0250	0.100
Vanadium	0.0426 U	0.0426	0.100
Batch number: 173120570804B	Sample number(s): 9304777-9304781,9304786-9304787,9304792		
Selenium	0.100 U	0.100	0.400

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Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/18/2017 11:00

Group Number: 1872396

Method Blank (continued)

Analysis Name	Result	MDL**	LOQ
	mg/kg	mg/kg	mg/kg
Batch number: 173120570804D Barium	Sample number(s): 9304777-9304781,9304786-9304787,9304792 0.182 U	0.182	0.400
Batch number: 173120571101 Mercury	Sample number(s): 9304777-9304781,9304786-9304787,9304792 0.0100 U	0.0100	0.100
Batch number: 173120570502 Aluminum	Sample number(s): 9304794 0.0894 U	0.0894	0.200
Calcium	0.0600 U	0.0600	0.200
Iron	0.0805 U	0.0805	0.200
Magnesium	0.0374 U	0.0374	0.100
Potassium	0.179 U	0.179	0.500
Sodium	0.321 U	0.321	1.00
Zinc	0.0065 U	0.0065	0.0200
Batch number: 173120605006A Antimony	Sample number(s): 9304794 0.00045 U	0.00045	0.0010
Arsenic	0.00072 U	0.00072	0.0020
Beryllium	0.000071 U	0.000071	0.00050
Cadmium	0.00015 U	0.00015	0.00050
Chromium	0.00087 U	0.00087	0.0020
Cobalt	0.00016 U	0.00016	0.00050
Copper	0.00054 U	0.00054	0.0020
Lead	0.00011 U	0.00011	0.0010
Manganese	0.00090 U	0.00090	0.0020
Nickel	0.0010 U	0.0010	0.0020
Silver	0.00015 U	0.00015	0.00050
Thallium	0.00012 U	0.00012	0.00050
Vanadium	0.00023 J	0.00021	0.00050
Batch number: 173120605006B Selenium	Sample number(s): 9304794 0.00050 U	0.00050	0.0020
Batch number: 173120605006D Barium	Sample number(s): 9304794 0.00072 U	0.00072	0.0020
Batch number: 173130571303 Mercury	Sample number(s): 9304794 0.000050 U	0.000050	0.00020
Batch number: 17321667631A Total Organic Carbon (TOC)	Sample number(s): 9304777,9304782-9304788 100 U	100	300
Batch number: 17321667631B Total Organic Carbon (TOC)	Sample number(s): 9304778-9304781,9304791 100 U	100	300
Batch number: 17325667631A Total Organic Carbon (TOC)	Sample number(s): 9304789,9304792 100 U	100	300

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Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/18/2017 11:00

Group Number: 1872396

Method Blank (continued)

Analysis Name	Result mg/kg	MDL** mg/kg	LOQ mg/kg	
			mg/l	mg/l
Batch number: 17325667631B Total Organic Carbon (TOC)	Sample number(s): 9304790 100 U	100	300	
Batch number: 17317667604A Total Organic Carbon (Quad)	Sample number(s): 9304794 0.50 U	0.50	1.0	

LCS/LCSD

Analysis Name	LCS Spike Added ug/kg	LCS Conc ug/kg	LCSD Spike Added ug/kg	LCSD Conc ug/kg	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: A173212AA	Sample number(s): 9304777								
Acetone	150	145.4	150	146.81	97	98	60-140	1	30
Benzene	20	18.6	20	18.62	93	93	70-130	0	30
Bromodichloromethane	20	18.35	20	19.12	92	96	70-130	4	30
2-Butanone	150	141.02	150	148.89	94	99	60-140	5	30
n-Butylbenzene	20	17.29	20	19.3	86	97	70-130	11	30
sec-Butylbenzene	20	17.88	20	18.61	89	93	70-130	4	30
tert-Butylbenzene	20	17.37	20	18.12	87	91	70-130	4	30
Carbon Disulfide	20	22.16	20	22.56	111	113	60-140	2	30
Carbon Tetrachloride	20	19.66	20	18.94	98	95	70-130	4	30
Chlorobenzene	20	18.08	20	18.32	90	92	70-130	1	30
Chloroethane	20	17.02	20	18.45	85	92	60-140	8	30
Chloroform	20	19.95	20	19.54	100	98	70-130	2	30
Chloromethane	20	17.52	20	19.23	88	96	60-140	9	30
2-Chlorotoluene	20	17.73	20	18.32	89	92	70-130	3	30
4-Chlorotoluene	20	17.21	20	17.94	86	90	70-130	4	30
Chlorotrifluoroethene	20	16.25	20	15.71	81	79	70-130	3	30
Dibromochloromethane	20	18.38	20	17.23	92	86	70-130	6	30
1,2-Dibromoethane	20	18.08	20	16.73	90	84	70-130	8	30
1,2-Dichlorobenzene	20	17.71	20	18.58	89	93	70-130	5	30
1,3-Dichlorobenzene	20	17.41	20	17.88	87	89	70-130	3	30
1,4-Dichlorobenzene	20	17.75	20	18.14	89	91	70-130	2	30
Dichlorodifluoromethane	20	17.41	20	18.34	87	92	60-140	5	30
1,1-Dichloroethane	20	19.81	20	20.47	99	102	70-130	3	30
1,2-Dichloroethane	20	17.78	20	17.64	89	88	70-130	1	30
1,1-Dichloroethene	20	21.95	20	23.11	110	116	70-130	5	30
cis-1,2-Dichloroethene	20	19.65	20	20.89	98	104	70-130	6	30
trans-1,2-Dichloroethene	20	20.47	20	21.63	102	108	70-130	6	30
1,2-Dichloroethene (Total)	40	40.12	40	42.52	100	106	70-130	6	30
Dichlorofluoromethane	20	21.94	20	22.78	110	114	70-130	4	30

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Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/18/2017 11:00

Group Number: 1872396

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/kg	LCS Conc ug/kg	LCSD Spike Added ug/kg	LCSD Conc ug/kg	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
1,2-Dichloropropane	20	18.92	20	19.23	95	96	70-130	2	30
1,1-Dichloropropene	20	18.74	20	18.04	94	90	70-130	4	30
cis-1,3-Dichloropropene	20	17.79	20	18.06	89	90	70-130	1	30
Ethylbenzene	20	18.01	20	18.21	90	91	70-130	1	30
Freon 113	20	21.81	20	22.55	109	113	70-130	3	30
Freon 133a	20	18.52	20	18.61	93	93	70-130	0	30
n-Hexane	20	18.71	20	20.37	94	102	70-130	8	30
2-Hexanone	100	80.66	100	82.34	81	82	60-140	2	30
Isobutyl Alcohol	500	499.06	500	442.71	100	89	70-130	12	30
Isopropylbenzene	20	18.86	20	19.02	94	95	70-130	1	30
p-Isopropyltoluene	20	17.72	20	18.22	89	91	70-130	3	30
Methacrylonitrile	150	137.28	150	132.11	92	88	70-130	4	30
Methyl Methacrylate	20	15.54	20	15.53	78	78	70-130	0	30
Methyl Tertiary Butyl Ether	20	16.66	20	17.48	83	87	70-130	5	30
4-Methyl-2-pentanone	100	82.68	100	81.45	83	81	60-140	1	30
Methylene Chloride	20	19.78	20	20.57	99	103	70-130	4	30
Propionitrile	150	157.51	150	164.98	105	110	70-130	5	30
n-Propylbenzene	20	18	20	18.52	90	93	70-130	3	30
Styrene	20	17.92	20	18.27	90	91	70-130	2	30
1,1,1,2-Tetrachloroethane	20	18	20	17.93	90	90	70-130	0	30
1,1,2,2-Tetrachloroethane	20	16.76	20	16.83	84	84	70-130	0	30
Tetrachloroethene	20	20.43	20	20.07	102	100	70-130	2	30
Tetrahydrofuran	100	103.36	100	101.17	103	101	70-130	2	30
Toluene	20	20.35	20	20.43	102	102	70-130	0	30
1,1,1-Trichloroethane	20	19.71	20	18.53	99	93	70-130	6	30
1,1,2-Trichloroethane	20	20.21	20	19.86	101	99	70-130	2	30
Trichloroethene	20	17.98	20	18.14	90	91	70-130	1	30
Trichlorofluoromethane	20	19.15	20	20.11	96	101	60-140	5	30
1,2,4-Trimethylbenzene	20	17.67	20	18.23	88	91	70-130	3	30
1,3,5-Trimethylbenzene	20	17.47	20	18.02	87	90	70-130	3	30
Vinyl Chloride	20	17.66	20	19.31	88	97	70-130	9	30
m+p-Xylene	40	36.4	40	38.62	91	97	70-130	6	30
o-Xylene	20	17.86	20	17.59	89	88	70-130	2	30
Xylene (Total)	60	54.25	60	56.21	90	94	70-130	4	30

Batch number: J173191AA

Sample number(s): 9304777, 9304782-9304784

Chlorodifluoroethane	20	22.28	20	19.63	111	98	70-130	13	30
Chlorodifluoromethane	20	20.9	20	20.4	105	102	70-130	2	30
Chlorofluoromethane	20	19.4	20	19.5	97	98	70-130	1	30
Chloropentafluoroethane	250	223.81	250	216.72	90	87	70-130	3	30
1,1-Dichloro-1-fluoroethane	20	20.7	20	19.47	103	97	70-130	6	30
1,2-Dichloro-1-fluoroethane	20	19.45	20	18.93	97	95	70-130	3	30
Dichlorotetrafluoroethane	20	17.8	20	18.28	89	91	70-130	3	30
1,2-Dichlorotrifluoroethane	20	18.73	20	18.33	94	92	70-130	2	30

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Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/18/2017 11:00

Group Number: 1872396

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/kg	LCS Conc ug/kg	LCSD Spike Added ug/kg	LCSD Conc ug/kg	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Dichlorotrifluoroethane	20	19.51	20	19.4	98	97	70-130	1	30
Fluoromethane	25	43.73	25	40.48	175*	162*	70-130	8	30
Freon 113a	20	17.79	20	17.09	89	85	70-130	4	30
1,1,2-Trifluoroethane	20	19.03	20	19.15	95	96	70-130	1	30
Vinyl fluoride	100	110.72	100	105.18	111	105	70-130	5	30
Batch number: J173211AA	Sample number(s): 9304778-9304780,9304786-9304792								
Chlorodifluoroethane	20	21.69	20	19.45	108	97	70-130	11	30
Chlorodifluoromethane	20	21.17	20	19.68	106	98	70-130	7	30
Chlorofluoromethane	20	18.35	20	17.66	92	88	70-130	4	30
Chloropentafluoroethane	250	332.81	250	303.88	133*	122	70-130	9	30
1,1-Dichloro-1-fluoroethane	20	19.14	20	17.43	96	87	70-130	9	30
1,2-Dichloro-1-fluoroethane	20	19.05	20	18.75	95	94	70-130	2	30
Dichlorotetrafluoroethane	20	18.46	20	17.38	92	87	70-130	6	30
1,2-Dichlorotrifluoroethane	20	18.25	20	17.67	91	88	70-130	3	30
Dichlorotrifluoroethane	20	18.6	20	17.64	93	88	70-130	5	30
Fluoromethane	25	37.36	25	34.86	149*	139*	70-130	7	30
Freon 113a	20	17.91	20	16.42	90	82	70-130	9	30
1,1,2-Trifluoroethane	20	19.02	20	18.07	95	90	70-130	5	30
Vinyl fluoride	100	108.84	100	102.15	109	102	70-130	6	30
Batch number: J173251AA	Sample number(s): 9304785								
Chlorodifluoroethane	20	18.19	20	17.99	91	90	70-130	1	30
Chlorodifluoromethane	20	18.44	20	18.98	92	95	70-130	3	30
Chlorofluoromethane	20	15.61	20	15.89	78	79	70-130	2	30
Chloropentafluoroethane	250	217.03	250	226.14	87	90	70-130	4	30
1,1-Dichloro-1-fluoroethane	20	16.04	20	16.66	80	83	70-130	4	30
1,2-Dichloro-1-fluoroethane	20	17.48	20	17.86	87	89	70-130	2	30
Dichlorotetrafluoroethane	20	17.21	20	15.88	86	79	70-130	8	30
1,2-Dichlorotrifluoroethane	20	15.94	20	16.5	80	83	70-130	3	30
Dichlorotrifluoroethane	20	16.63	20	17.07	83	85	70-130	3	30
Fluoromethane	25	25	25	25.04	100	100	70-130	0	30
Freon 113a	20	17.28	20	17.34	86	87	70-130	0	30
1,1,2-Trifluoroethane	20	16.35	20	16.42	82	82	70-130	0	30
Vinyl fluoride	100	76.35	100	76.3	76	76	70-130	0	30
Batch number: R173182AA	Sample number(s): 9304778-9304780,9304787								
Acetone	7500	7027.25	7500	7462.91	94	100	60-140	6	30
Benzene	1000	1050.73	1000	1037.16	105	104	70-130	1	30
Bromodichloromethane	1000	974.45	1000	982.06	97	98	70-130	1	30
2-Butanone	7500	5731.28	7500	5881.33	76	78	60-140	3	30
n-Butylbenzene	1000	899.74	1000	928.96	90	93	70-130	3	30
sec-Butylbenzene	1000	889.98	1000	919.52	89	92	70-130	3	30
tert-Butylbenzene	1000	836.69	1000	871.58	84	87	70-130	4	30
Carbon Disulfide	1000	982.27	1000	1012.08	98	101	60-140	3	30

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(2) The unspiked result was more than four times the spike added.

is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/18/2017 11:00

Group Number: 1872396

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/kg	LCS Conc ug/kg	LCSD Spike Added ug/kg	LCSD Conc ug/kg	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Carbon Tetrachloride	1000	998.58	1000	988.89	100	99	70-130	1	30
Chlorobenzene	1000	940.54	1000	930.39	94	93	70-130	1	30
Chloroethane	1000	843.75	1000	839.45	84	84	60-140	1	30
Chloroform	1000	1030.34	1000	1032.52	103	103	70-130	0	30
Chloromethane	1000	856.68	1000	789.59	86	79	60-140	8	30
2-Chlorotoluene	1000	874.65	1000	888.05	87	89	70-130	2	30
4-Chlorotoluene	1000	907.39	1000	899.56	91	90	70-130	1	30
Chlorotrifluoroethene	1000	560.09	1000	718.3	56*	72	70-130	25	30
Dibromochloromethane	1000	915.66	1000	873.74	92	87	70-130	5	30
1,2-Dibromoethane	1000	953.42	1000	897.13	95	90	70-130	6	30
1,2-Dichlorobenzene	1000	906.61	1000	912.45	91	91	70-130	1	30
1,3-Dichlorobenzene	1000	896.64	1000	916.46	90	92	70-130	2	30
1,4-Dichlorobenzene	1000	897.86	1000	915.48	90	92	70-130	2	30
Dichlorodifluoromethane	1000	570.32	1000	501.27	57*	50*	60-140	13	30
1,1-Dichloroethane	1000	1046.57	1000	1046.64	105	105	70-130	0	30
1,2-Dichloroethane	1000	1070.54	1000	1065.48	107	107	70-130	0	30
1,1-Dichloroethene	1000	1088.5	1000	1107.44	109	111	70-130	2	30
cis-1,2-Dichloroethene	1000	1104.35	1000	1085.54	110	109	70-130	2	30
trans-1,2-Dichloroethene	1000	1074.57	1000	1065.94	107	107	70-130	1	30
1,2-Dichloroethene (Total)	2000	2178.92	2000	2151.48	109	108	70-130	1	30
Dichlorofluoromethane	1000	915.14	1000	925.27	92	93	70-130	1	30
1,2-Dichloropropane	1000	1031.49	1000	1033.08	103	103	70-130	0	30
1,1-Dichloropropene	1000	1015.81	1000	994.47	102	99	70-130	2	30
cis-1,3-Dichloropropene	1000	1056.43	1000	1040.52	106	104	70-130	2	30
Ethylbenzene	1000	924.54	1000	928.19	92	93	70-130	0	30
Freon 113	1000	965.84	1000	986.47	97	99	70-130	2	30
Freon 133a	1000	1112.8	1000	1199.44	111	120	70-130	7	30
n-Hexane	1000	852.54	1000	867.73	85	87	70-130	2	30
2-Hexanone	5000	4283.98	5000	4226.83	86	85	60-140	1	30
Isobutyl Alcohol	25000	20792.72	25000	20307.75	83	81	70-130	2	30
Isopropylbenzene	1000	924.9	1000	927.28	92	93	70-130	0	30
p-Isopropyltoluene	1000	903.54	1000	926.69	90	93	70-130	3	30
Methacrylonitrile	7500	7720.95	7500	7736.3	103	103	70-130	0	30
Methyl Methacrylate	1000	940	1000	943.46	94	94	70-130	0	30
Methyl Tertiary Butyl Ether	1000	1037.18	1000	1026.61	104	103	70-130	1	30
4-Methyl-2-pentanone	5000	4947.81	5000	4912.52	99	98	60-140	1	30
Methylene Chloride	1000	1084.27	1000	1076.07	108	108	70-130	1	30
Propionitrile	7500	7605.42	7500	7794.94	101	104	70-130	2	30
n-Propylbenzene	1000	858.34	1000	861.67	86	86	70-130	0	30
Styrene	1000	914.77	1000	898.28	91	90	70-130	2	30
1,1,1,2-Tetrachloroethane	1000	924.84	1000	929.91	92	93	70-130	1	30
1,1,2,2-Tetrachloroethane	1000	856.72	1000	847.02	86	85	70-130	1	30
Tetrachloroethene	1000	936.62	1000	910.78	94	91	70-130	3	30
Tetrahydrofuran	5000	4417.47	5000	4492.41	88	90	70-130	2	30

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Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/18/2017 11:00

Group Number: 1872396

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/kg	LCS Conc ug/kg	LCSD Spike Added ug/kg	LCSD Conc ug/kg	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Toluene	1000	973.6	1000	919.66	97	92	70-130	6	30
1,1,1-Trichloroethane	1000	1021.98	1000	1033.56	102	103	70-130	1	30
1,1,2-Trichloroethane	1000	960.37	1000	937.49	96	94	70-130	2	30
Trichloroethene	1000	1038.42	1000	992.55	104	99	70-130	5	30
Trichlorofluoromethane	1000	900.98	1000	898.77	90	90	60-140	0	30
1,2,4-Trimethylbenzene	1000	877.09	1000	888.91	88	89	70-130	1	30
1,3,5-Trimethylbenzene	1000	885.46	1000	891.38	89	89	70-130	1	30
Vinyl Chloride	1000	892.2	1000	826.25	89	83	70-130	8	30
m+p-Xylene	2000	1910.57	2000	1905.82	96	95	70-130	0	30
o-Xylene	1000	933.2	1000	918.02	93	92	70-130	2	30
Xylene (Total)	3000	2843.76	3000	2823.84	95	94	70-130	1	30
Batch number: X173182AA	Sample number(s): 9304782-9304786, 9304788-9304792								
Acetone	150	156.19	150	162.5	104	108	60-140	4	30
Benzene	20	20.21	20	20.12	101	101	70-130	0	30
Bromodichloromethane	20	18.53	20	18.5	93	92	70-130	0	30
2-Butanone	150	146.79	150	154.85	98	103	60-140	5	30
n-Butylbenzene	20	17.09	20	17.22	85	86	70-130	1	30
sec-Butylbenzene	20	16.48	20	16.7	82	83	70-130	1	30
tert-Butylbenzene	20	15.27	20	15.53	76	78	70-130	2	30
Carbon Disulfide	20	18.82	20	18.6	94	93	60-140	1	30
Carbon Tetrachloride	20	19.68	20	19.64	98	98	70-130	0	30
Chlorobenzene	20	18.7	20	18.33	94	92	70-130	2	30
Chloroethane	20	18.94	20	19.33	95	97	60-140	2	30
Chloroform	20	20.03	20	20.01	100	100	70-130	0	30
Chloromethane	20	20.2	20	20.88	101	104	60-140	3	30
2-Chlorotoluene	20	16.29	20	16.54	81	83	70-130	2	30
4-Chlorotoluene	20	16.95	20	17.01	85	85	70-130	0	30
Chlorotrifluoroethene	20	18.39	20	18.03	92	90	70-130	2	30
Dibromochloromethane	20	16.27	20	16.15	81	81	70-130	1	30
1,2-Dibromoethane	20	16.27	20	16.65	81	83	70-130	2	30
1,2-Dichlorobenzene	20	17.2	20	17.34	86	87	70-130	1	30
1,3-Dichlorobenzene	20	17.05	20	17.29	85	86	70-130	1	30
1,4-Dichlorobenzene	20	17.73	20	17.71	89	89	70-130	0	30
Dichlorodifluoromethane	20	20.83	20	20.93	104	105	60-140	0	30
1,1-Dichloroethane	20	19.6	20	19.75	98	99	70-130	1	30
1,2-Dichloroethane	20	20.36	20	20.16	102	101	70-130	1	30
1,1-Dichloroethene	20	19.93	20	20.16	100	101	70-130	1	30
cis-1,2-Dichloroethene	20	19.68	20	19.89	98	99	70-130	1	30
trans-1,2-Dichloroethene	20	19.88	20	19.76	99	99	70-130	1	30
1,2-Dichloroethene (Total)	40	39.56	40	39.65	99	99	70-130	0	30
Dichlorofluoromethane	20	23.21	20	23.21	116	116	70-130	0	30
1,2-Dichloropropane	20	21.15	20	21.03	106	105	70-130	1	30
1,1-Dichloropropene	20	18.8	20	18.91	94	95	70-130	1	30

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Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/18/2017 11:00

Group Number: 1872396

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/kg	LCS Conc ug/kg	LCSD Spike Added ug/kg	LCSD Conc ug/kg	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
	ug/l	ug/l	ug/l	ug/l					
cis-1,3-Dichloropropene	20	16.23	20	16.6	81	83	70-130	2	30
Ethylbenzene	20	17.91	20	17.79	90	89	70-130	1	30
Freon 113	20	20.83	20	20.8	104	104	70-130	0	30
Freon 133a	20	14.79	20	14.79	74	74	70-130	0	30
n-Hexane	20	18.14	20	18.47	91	92	70-130	2	30
2-Hexanone	100	87.18	100	91.64	87	92	60-140	5	30
Isobutyl Alcohol	500	633.34	500	581.5	127	116	70-130	9	30
Isopropylbenzene	20	16.9	20	16.84	84	84	70-130	0	30
p-Isopropyltoluene	20	16.79	20	17.03	84	85	70-130	1	30
Methacrylonitrile	150	152.93	150	156.81	102	105	70-130	3	30
Methyl Methacrylate	20	17.37	20	17.99	87	90	70-130	4	30
Methyl Tertiary Butyl Ether	20	14.48	20	15.43	72	77	70-130	6	30
4-Methyl-2-pentanone	100	97.88	100	102.67	98	103	60-140	5	30
Methylene Chloride	20	21.42	20	21.32	107	107	70-130	0	30
Propionitrile	150	202.57	150	182.3	135*	122	70-130	11	30
n-Propylbenzene	20	17.19	20	17.42	86	87	70-130	1	30
Styrene	20	17.89	20	17.63	89	88	70-130	1	30
1,1,1,2-Tetrachloroethane	20	17.73	20	17.48	89	87	70-130	1	30
1,1,2,2-Tetrachloroethane	20	16.22	20	16.73	81	84	70-130	3	30
Tetrachloroethene	20	18.49	20	18.08	92	90	70-130	2	30
Tetrahydrofuran	100	125.94	100	114.61	126	115	70-130	9	30
Toluene	20	18.12	20	17.88	91	89	70-130	1	30
1,1,1-Trichloroethane	20	20.06	20	19.93	100	100	70-130	1	30
1,1,2-Trichloroethane	20	18.16	20	17.82	91	89	70-130	2	30
Trichloroethene	20	19.06	20	18.89	95	94	70-130	1	30
Trichlorofluoromethane	20	22.94	20	22.93	115	115	60-140	0	30
1,2,4-Trimethylbenzene	20	16.58	20	16.71	83	84	70-130	1	30
1,3,5-Trimethylbenzene	20	16.27	20	16.5	81	82	70-130	1	30
Vinyl Chloride	20	19.72	20	20.18	99	101	70-130	2	30
m+p-Xylene	40	36.48	40	36.26	91	91	70-130	1	30
o-Xylene	20	16.31	20	16.19	82	81	70-130	1	30
Xylene (Total)	60	52.79	60	52.45	88	87	70-130	1	30

Batch number: J173201AA

Sample number(s): 9304793-9304794

Chlorodifluoroethane	20	33.38	20	33.94	167*	170*	57-153	2	30
Chlorodifluoromethane	20	35.91	20	36.36	180*	182*	60-157	1	30
Chlorofluoromethane	20	22.81	20	22.96	114	115	65-120	1	30
Chloropentafluoroethane	250	216.64	250	232.65	87	93	13-171	7	30
1,1-Dichloro-1-fluoroethane	20	28.22	20	28.41	141	142	56-158	1	30
1,2-Dichloro-1-fluoroethane	20	23.75	20	24.17	119	121*	71-120	2	30
Dichlorotetrafluoroethane	20	22.63	20	22.23	113	111	49-159	2	30
1,2-Dichlorotrifluoroethane	20	25.9	20	26.03	129*	130*	73-127	1	30
Dichlorotrifluoroethane	20	22.23	20	22.55	111	113	80-120	1	30

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Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/18/2017 11:00

Group Number: 1872396

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Fluoromethane	25	32.71	25	32.35	131	129	24-147	1	30
Freon 113a	20	23.71	20	23.95	119	120	60-156	1	30
1,1,2-Trifluoroethane	20	35.43	20	34.68	177*	173*	66-133	2	30
Vinyl fluoride	50	50.35	50	50.85	101	102	25-139	1	30
Batch number: Y173182AA	Sample number(s): 9304793-9304794								
Acetone	150	153.62	150	148.07	102	99	60-140	4	20
Benzene	20	20.97	20	20.86	105	104	70-130	1	20
Bromodichloromethane	20	19.97	20	19.74	100	99	70-130	1	20
2-Butanone	150	150.69	150	151.01	100	101	60-140	0	20
n-Butylbenzene	20	20.93	20	21.02	105	105	70-130	0	20
sec-Butylbenzene	20	21.56	20	21.65	108	108	70-130	0	20
tert-Butylbenzene	20	20.79	20	20.84	104	104	70-130	0	20
Carbon Disulfide	20	23.04	20	23.06	115	115	60-140	0	20
Carbon Tetrachloride	20	18.34	20	18.33	92	92	70-130	0	20
Chlorobenzene	20	20.43	20	20.41	102	102	70-130	0	20
Chloroethane	20	18.51	20	18.66	93	93	60-140	1	20
Chloroform	20	20.16	20	20.3	101	101	70-130	1	20
Chloromethane	20	17.75	20	17.91	89	90	60-140	1	20
2-Chlorotoluene	20	20.28	20	20.38	101	102	70-130	0	20
4-Chlorotoluene	20	20.17	20	20.32	101	102	70-130	1	20
Chlorotrifluoroethylene	20	14.18	20	14.51	71	73	70-130	2	20
Dibromochloromethane	20	20.31	20	19.91	102	100	70-130	2	20
1,2-Dibromoethane	20	20.8	20	20.75	104	104	70-130	0	20
1,2-Dichlorobenzene	20	20.33	20	20.33	102	102	70-130	0	20
1,3-Dichlorobenzene	20	20.42	20	20.34	102	102	70-130	0	20
1,4-Dichlorobenzene	20	20.66	20	20.63	103	103	70-130	0	20
Dichlorodifluoromethane	20	16.4	20	16.61	82	83	60-140	1	20
1,1-Dichloroethane	20	20.57	20	20.61	103	103	70-130	0	20
1,2-Dichloroethane	20	19.26	20	19.25	96	96	70-130	0	20
1,1-Dichloroethene	20	22.49	20	22.68	112	113	70-130	1	20
cis-1,2-Dichloroethene	20	21.67	20	21.45	108	107	70-130	1	20
trans-1,2-Dichloroethene	20	21.53	20	21.71	108	109	70-130	1	20
1,2-Dichloroethene (Total)	40	43.2	40	43.15	108	108	70-130	0	20
Dichlorofluoromethane	20	19.04	20	18.94	95	95	70-130	1	20
1,2-Dichloropropane	20	20.82	20	20.85	104	104	70-130	0	20
1,1-Dichloropropene	20	20.39	20	20.35	102	102	70-130	0	20
cis-1,3-Dichloropropene	20	20.33	20	20.42	102	102	70-130	0	20
Ethylbenzene	20	21.31	20	21.36	107	107	70-130	0	20
Freon 113	20	19.92	20	19.77	100	99	70-130	1	20
Freon 133a	20	16.32	20	16.57	82	83	70-130	2	20
n-Hexane	20	19.88	20	20.11	99	101	70-130	1	20
2-Hexanone	100	107.95	100	107.83	108	108	60-140	0	20
Isobutyl Alcohol	500	505.23	500	490.9	101	98	70-130	3	20

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Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/18/2017 11:00

Group Number: 1872396

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Isopropylbenzene	20	21.51	20	21.47	108	107	70-130	0	20
p-Isopropyltoluene	20	21.48	20	21.61	107	108	70-130	1	20
Methacrylonitrile	150	161.36	150	160.95	108	107	70-130	0	20
Methyl Methacrylate	20	20.75	20	20.96	104	105	70-130	1	20
Methyl Tertiary Butyl Ether	20	20.78	20	20.77	104	104	70-130	0	20
4-Methyl-2-pentanone	100	103.64	100	104.01	104	104	60-140	0	20
Methylene Chloride	20	21.3	20	21.35	106	107	70-130	0	20
Propionitrile	150	162.93	150	161.5	109	108	70-130	1	20
n-Propylbenzene	20	21.39	20	21.35	107	107	70-130	0	20
Styrene	20	22.39	20	22.41	112	112	70-130	0	20
1,1,1,2-Tetrachloroethane	20	19.58	20	19.24	98	96	70-130	2	20
1,1,2,2-Tetrachloroethane	20	20.85	20	20.95	104	105	70-130	0	20
Tetrachloroethene	20	20.44	20	20.47	102	102	70-130	0	20
Tetrahydrofuran	100	106.5	100	105.89	106	106	70-130	1	20
Toluene	20	21.35	20	21.55	107	108	70-130	1	20
1,1,1-Trichloroethane	20	19	20	19.28	95	96	70-130	1	20
1,1,2-Trichloroethane	20	21.7	20	21.36	108	107	70-130	2	20
Trichloroethene	20	20.34	20	20.37	102	102	70-130	0	20
Trichlorofluoromethane	20	18.15	20	18.18	91	91	60-140	0	20
1,2,4-Trimethylbenzene	20	21.43	20	21.62	107	108	70-130	1	20
1,3,5-Trimethylbenzene	20	21.31	20	21.35	107	107	70-130	0	20
Vinyl Chloride	20	17.97	20	18.1	90	90	70-130	1	20
m+p-Xylene	40	43.18	40	43.29	108	108	70-130	0	20
o-Xylene	20	20.94	20	20.97	105	105	70-130	0	20
Xylene (Total)	60	64.12	60	64.27	107	107	70-130	0	20
	ug/kg	ug/kg	ug/kg	ug/kg					
Batch number: 17314SLH026	Sample number(s): 9304777								
Acenaphthene	1666.67	1669.65			100		70-130		
Acenaphthylene	1666.67	1628.28			98		70-130		
Acetophenone	1666.67	1545.28			93		70-130		
4-Aminobiphenyl	1666.67	3913.77			235*		70-130		
Aniline	1666.67	1295.54			78		20-160		
Anthracene	1666.67	1670.27			100		70-130		
Benzidine	8333.33	3540.07			42		20-160		
Benzo(a)anthracene	1666.67	1530.23			92		70-130		
Benzo(a)pyrene	1666.67	1566.76			94		70-130		
Benzo(b)fluoranthene	1666.67	1740.61			104		70-130		
Benzo(g,h,i)perylene	1666.67	1582.96			95		70-130		
Benzo(k)fluoranthene	1666.67	1599.24			96		70-130		
1,1'-Biphenyl	1666.67	1601.07			96		70-130		
4-Bromophenyl-phenylether	1666.67	1616.3			97		70-130		
Butylbenzylphthalate	1666.67	1680.7			101		70-130		
Di-n-butylphthalate	1666.67	1619.82			97		70-130		

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Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/18/2017 11:00

Group Number: 1872396

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/kg	LCS Conc ug/kg	LCSD Spike Added ug/kg	LCSD Conc ug/kg	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Carbazole	1666.67	1599.63			96		70-130		
4-Chloro-3-methylphenol	1666.67	1678.21			101		70-130		
4-Chloroaniline	1666.67	947.56			57*		70-130		
bis(2-Chloroethoxy)methane	1666.67	1635.05			98		70-130		
bis(2-Chloroethyl)ether	1666.67	1489.11			89		70-130		
2-Chloronaphthalene	1666.67	1600.2			96		70-130		
2-Chlorophenol	1666.67	1728.21			104		70-130		
4-Chlorophenyl-phenylether	1666.67	1604.67			96		70-130		
2,2'-oxybis(1-Chloropropane)	1666.67	1472.14			88		70-130		
Chrysene	1666.67	1551.43			93		70-130		
Dibenz(a,h)anthracene	1666.67	1670.74			100		70-130		
Dibenzo furan	1666.67	1632.44			98		70-130		
3,3'-Dichlorobenzidine	1666.67	1434.66			86		70-130		
2,4-Dichlorophenol	1666.67	1707.75			102		70-130		
Diethylphthalate	1666.67	1610.51			97		70-130		
2,4-Dimethylphenol	1666.67	1387.25			83		70-130		
Dimethylphthalate	1666.67	1640.61			98		70-130		
4,6-Dinitro-2-methylphenol	1666.67	1551.56			93		70-130		
2,4-Dinitrophenol	3333.33	3374.82			101		20-160		
2,4-Dinitrotoluene	1666.67	1662.06			100		70-130		
2,6-Dinitrotoluene	1666.67	1733.25			104		70-130		
1,4-Dioxane	1666.67	1032.98			62		20-160		
Diphenyl ether	1666.67	1462.08			88		70-130		
1,2-Diphenylhydrazine	1666.67	1607.66			96		70-130		
bis(2-Ethylhexyl)phthalate	1666.67	1652.69			99		70-130		
Fluoranthene	1666.67	1632.41			98		70-130		
Fluorene	1666.67	1615.42			97		70-130		
Hexachlorobenzene	1666.67	1565.65			94		70-130		
Hexachlorobutadiene	1666.67	1605.89			96		70-130		
Hexachlorocyclopentadiene	3333.33	2631.53			79		20-160		
Hexachloroethane	1666.67	1534.79			92		20-160		
Indeno(1,2,3-cd)pyrene	1666.67	1631.37			98		70-130		
Isophorone	1666.67	1552.61			93		70-130		
2-Methylnaphthalene	1666.67	1592.35			96		70-130		
2-Methylphenol	1666.67	1676.26			101		70-130		
4-Methylphenol	1666.67	1647.71			99		20-160		
Naphthalene	1666.67	1610.53			97		70-130		
1-Naphthylamine	3333.33	2259.78			68*		70-130		
2-Naphthylamine	3333.33	1331.8			40*		70-130		
2-Nitroaniline	1666.67	1705.15			102		70-130		
3-Nitroaniline	1666.67	1594.91			96		70-130		
4-Nitroaniline	1666.67	1439.57			86		70-130		
Nitrobenzene	1666.67	1623.33			97		70-130		
2-Nitrophenol	1666.67	1665.73			100		70-130		

*- Outside of specification

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(2) The unspiked result was more than four times the spike added.

is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/18/2017 11:00

Group Number: 1872396

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/kg	LCS Conc ug/kg	LCSD Spike Added ug/kg	LCSD Conc ug/kg	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
4-Nitrophenol	1666.67	1493.34			90		20-160		
N-Nitrosodimethylamine	1666.67	1530.79			92		20-160		
N-Nitroso-di-n-propylamine	1666.67	1537.88			92		70-130		
N-Nitrosodiphenylamine	1666.67	1577.75			95		70-130		
Di-n-octylphthalate	1666.67	1865.34			112		70-130		
Parathion	1666.67	1477.24			89		20-160		
Pentachlorobenzene	1666.67	1535.52			92		20-160		
Pentachlorophenol	1666.67	1683.69			101		20-160		
Phenanthrene	1666.67	1589.44			95		70-130		
Phenol	1666.67	1714.97			103		20-160		
Pyrene	1666.67	1567.4			94		70-130		
2,3,4,6-Tetrachlorophenol	1666.67	1694.36			102		70-130		
o-Toluidine	1666.67	1268.36			76		70-130		
1,2,4-Trichlorobenzene	1666.67	1584.9			95		70-130		
2,4,5-Trichlorophenol	1666.67	1687.46			101		70-130		
2,4,6-Trichlorophenol	1666.67	1783.27			107		70-130		
Batch number: 17317SLE026	Sample number(s): 9304778-9304780,9304782-9304792								
Acenaphthene	1666.67	1761.18			106		70-130		
Acenaphthylene	1666.67	1743.69			105		70-130		
Acetophenone	1666.67	1674.1			100		70-130		
4-Aminobiphenyl	1666.67	2406.01			144*		70-130		
Aniline	1666.67	1006.19			60		20-160		
Anthracene	1666.67	1695.21			102		70-130		
Benzidine	8333.33	2012.46			24		20-160		
Benzo(a)anthracene	1666.67	1765.52			106		70-130		
Benzo(a)pyrene	1666.67	1671.35			100		70-130		
Benzo(b)fluoranthene	1666.67	1782.97			107		70-130		
Benzo(g,h,i)perylene	1666.67	1574.05			94		70-130		
Benzo(k)fluoranthene	1666.67	1790.81			107		70-130		
1,1'-Biphenyl	1666.67	1753.44			105		70-130		
4-Bromophenyl-phenylether	1666.67	1699.5			102		70-130		
Butylbenzylphthalate	1666.67	1787.96			107		70-130		
Di-n-butylphthalate	1666.67	1748.68			105		70-130		
Carbazole	1666.67	1692.52			102		70-130		
4-Chloro-3-methylphenol	1666.67	1919.1			115		70-130		
4-Chloroaniline	1666.67	316.28			19*		70-130		
bis(2-Chloroethoxy)methane	1666.67	1795.06			108		70-130		
bis(2-Chloroethyl)ether	1666.67	1674.96			100		70-130		
2-Chloronaphthalene	1666.67	1570.47			94		70-130		
2-Chlorophenol	1666.67	1754.6			105		70-130		
4-Chlorophenyl-phenylether	1666.67	1715.77			103		70-130		
2,2'-oxybis(1-Chloropropane)	1666.67	1785.92			107		70-130		
Chrysene	1666.67	1752.44			105		70-130		

*- Outside of specification

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(2) The unspiked result was more than four times the spike added.

is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/18/2017 11:00

Group Number: 1872396

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/kg	LCS Conc ug/kg	LCSD Spike Added ug/kg	LCSD Conc ug/kg	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Dibenz(a,h)anthracene	1666.67	1649.49			99		70-130		
Dibenzofuran	1666.67	1733.13			104		70-130		
3,3'-Dichlorobenzidine	1666.67	1488.36			89		70-130		
2,4-Dichlorophenol	1666.67	1865.58			112		70-130		
Diethylphthalate	1666.67	1522.44			91		70-130		
2,4-Dimethylphenol	1666.67	1569.81			94		70-130		
Dimethylphthalate	1666.67	1722.8			103		70-130		
4,6-Dinitro-2-methylphenol	1666.67	1596.46			96		70-130		
2,4-Dinitrophenol	3333.33	2972.74			89		20-160		
2,4-Dinitrotoluene	1666.67	1766.97			106		70-130		
2,6-Dinitrotoluene	1666.67	1866.18			112		70-130		
1,4-Dioxane	1666.67	1294.25			78		20-160		
Diphenyl ether	1666.67	1606.02			96		70-130		
1,2-Diphenylhydrazine	1666.67	1886.37			113		70-130		
bis(2-Ethylhexyl)phthalate	1666.67	1739.83			104		70-130		
Fluoranthene	1666.67	1678.99			101		70-130		
Fluorene	1666.67	1758.4			106		70-130		
Hexachlorobenzene	1666.67	1716.98			103		70-130		
Hexachlorobutadiene	1666.67	1714.57			103		70-130		
Hexachlorocyclopentadiene	3333.33	2626.92			79		20-160		
Hexachloroethane	1666.67	1614.08			97		20-160		
Indeno(1,2,3-cd)pyrene	1666.67	1622.44			97		70-130		
Isophorone	1666.67	1735.94			104		70-130		
2-Methylnaphthalene	1666.67	1727.84			104		70-130		
2-Methylphenol	1666.67	1794.62			108		70-130		
4-Methylphenol	1666.67	1728.39			104		20-160		
Naphthalene	1666.67	1735.31			104		70-130		
1-Naphthylamine	3333.33	1525.19			46*		70-130		
2-Naphthylamine	3333.33	672.26			20*		70-130		
2-Nitroaniline	1666.67	1826.88			110		70-130		
3-Nitroaniline	1666.67	1483.4			89		70-130		
4-Nitroaniline	1666.67	1620.79			97		70-130		
Nitrobenzene	1666.67	1755.26			105		70-130		
2-Nitrophenol	1666.67	1764.53			106		70-130		
4-Nitrophenol	1666.67	1737.57			104		20-160		
N-Nitrosodimethylamine	1666.67	1738.77			104		20-160		
N-Nitroso-di-n-propylamine	1666.67	1750			105		70-130		
N-Nitrosodiphenylamine	1666.67	1712.51			103		70-130		
Di-n-octylphthalate	1666.67	1783.27			107		70-130		
Parathion	1666.67	1685.49			101		20-160		
Pentachlorobenzene	1666.67	1696.86			102		20-160		
Pentachlorophenol	1666.67	1707.98			102		20-160		
Phenanthrene	1666.67	1703.4			102		70-130		
Phenol	1666.67	1807.9			108		20-160		

*- Outside of specification

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(2) The unspiked result was more than four times the spike added.

is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/18/2017 11:00

Group Number: 1872396

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/kg	LCS Conc ug/kg	LCSD Spike Added ug/kg	LCSD Conc ug/kg	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
	ug/l	ug/l	ug/l	ug/l					
Pyrene	1666.67	1650.02			99		70-130		
2,3,4,6-Tetrachlorophenol	1666.67	1797.72			108		70-130		
o-Toluidine	1666.67	657.69			39*		70-130		
1,2,4-Trichlorobenzene	1666.67	1673.08			100		70-130		
2,4,5-Trichlorophenol	1666.67	1801.36			108		70-130		
2,4,6-Trichlorophenol	1666.67	1860.67			112		70-130		
Batch number: 17313WAN026	Sample number(s): 9304794								
Acenaphthene	50	47.34	50	47.6	95	95	70-130	1	20
Acenaphthylene	50	46.53	50	47.37	93	95	70-130	2	20
Acetophenone	50	46.04	50	46.11	92	92	70-130	0	20
4-Aminobiphenyl	50	102.82	50	108.15	206*	216*	70-130	5	20
Aniline	50	26.63	50	27.54	53	55	20-160	3	20
Anthracene	50	47.13	50	48.72	94	97	70-130	3	20
Benzidine	250	55.5	250	59.87	22	24	20-160	8	20
Benzo(a)anthracene	50	48.4	50	50.82	97	102	70-130	5	20
Benzo(a)pyrene	50	45.32	50	46	91	92	70-130	1	20
Benzo(b)fluoranthene	50	49.33	50	49.37	99	99	70-130	0	20
Benzo(g,h,i)perylene	50	45.86	50	45.26	92	91	70-130	1	20
Benzo(k)fluoranthene	50	48.39	50	49.29	97	99	70-130	2	20
1,1'-Biphenyl	50	47.12	50	48.38	94	97	70-130	3	20
4-Bromophenyl-phenylether	50	46.72	50	47.39	93	95	70-130	1	20
Butylbenzylphthalate	50	42	50	42.33	84	85	70-130	1	20
Di-n-butylphthalate	50	42.79	50	42.92	86	86	70-130	0	20
Carbazole	50	49.08	50	48.84	98	98	70-130	1	20
4-Chloro-3-methylphenol	50	47.39	50	47.48	95	95	70-130	0	20
4-Chloroaniline	50	27.25	50	29.06	55*	58*	70-130	6	20
bis(2-Chloroethoxy)methane	50	47.09	50	51.59	94	103	70-130	9	20
bis(2-Chloroethyl)ether	50	43.49	50	43.41	87	87	70-130	0	20
2-Chloronaphthalene	50	43.82	50	45.51	88	91	70-130	4	20
2-Chlorophenol	50	42.57	50	43.29	85	87	70-130	2	20
4-Chlorophenyl-phenylether	50	43.7	50	43.53	87	87	70-130	0	20
2,2'-oxybis(1-Chloropropane)	50	42.44	50	41.6	85	83	70-130	2	20
Chrysene	50	49.25	50	51.24	98	102	70-130	4	20
Dibenz(a,h)anthracene	50	46.72	50	48.77	93	98	70-130	4	20
Dibenzo furan	50	47.41	50	46.78	95	94	70-130	1	20
3,3'-Dichlorobenzidine	50	37.18	50	40.93	74	82	70-130	10	20
2,4-Dichlorophenol	50	42.83	50	44.57	86	89	70-130	4	20
Diethylphthalate	50	39.87	50	38.16	80	76	70-130	4	20
2,4-Dimethylphenol	50	35.94	50	37.41	72	75	70-130	4	20
Dimethylphthalate	50	32.4	50	31.43	65*	63*	70-130	3	20
4,6-Dinitro-2-methylphenol	50	49.7	50	48.5	99	97	70-130	2	20
2,4-Dinitrophenol	100	61.03	100	56.04	61	56	20-160	9	20

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Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/18/2017 11:00

Group Number: 1872396

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
2,4-Dinitrotoluene	50	47.06	50	46.92	94	94	70-130	0	20
2,6-Dinitrotoluene	50	49.5	50	48.95	99	98	70-130	1	20
1,4-Dioxane	50	22.76	50	22.09	46	44	20-160	3	20
Diphenyl ether	50	45.11	50	47.06	90	94	70-130	4	20
1,2-Diphenylhydrazine	50	46.75	50	48.28	94	97	70-130	3	20
bis(2-Ethylhexyl)phthalate	50	48.94	50	51.78	98	104	70-130	6	20
Fluoranthene	50	44.49	50	46.44	89	93	70-130	4	20
Fluorene	50	45.86	50	45.17	92	90	70-130	2	20
Hexachlorobenzene	50	44.81	50	45.75	90	92	70-130	2	20
Hexachlorobutadiene	50	35.3	50	34.97	71	70	70-130	1	20
Hexachlorocyclopentadiene	100	10.08	100	11.18	10*	11*	20-160	10	20
Hexachloroethane	50	32.32	50	32.65	65	65	20-160	1	20
Indeno(1,2,3-cd)pyrene	50	45.81	50	45.93	92	92	70-130	0	20
Isophorone	50	45.81	50	47.09	92	94	70-130	3	20
2-Methylnaphthalene	50	43.58	50	45.19	87	90	70-130	4	20
2-Methylphenol	50	43.73	50	44.73	87	89	70-130	2	20
4-Methylphenol	50	44.18	50	42.75	88	85	20-160	3	20
Naphthalene	50	40.79	50	42.13	82	84	70-130	3	20
1-Naphthylamine	100	31.75	100	31.78	32*	32*	70-130	0	20
2-Naphthylamine	100	28.87	100	30.79	29*	31*	70-130	6	20
2-Nitroaniline	50	51.76	50	49.03	104	98	70-130	5	20
3-Nitroaniline	50	35.75	50	37.25	72	74	70-130	4	20
4-Nitroaniline	50	43.03	50	40.03	86	80	70-130	7	20
Nitrobenzene	50	38.3	50	38.94	77	78	70-130	2	20
2-Nitrophenol	50	42.19	50	44.86	84	90	70-130	6	20
4-Nitrophenol	50	37.45	50	36.33	75	73	20-160	3	20
N-Nitrosodimethylamine	50	28.52	50	28.81	57	58	20-160	1	20
N-Nitroso-di-n-propylamine	50	49.53	50	49.73	99	99	70-130	0	20
N-Nitrosodiphenylamine	50	47.16	50	49.34	94	99	70-130	5	20
Di-n-octylphthalate	50	46.26	50	47.84	93	96	70-130	3	20
Parathion	50	46.73	50	47.1	93	94	20-160	1	20
Pentachlorobenzene	50	38.53	50	41.16	77	82	20-160	7	20
Pentachlorophenol	50	47	50	46.62	94	93	20-160	1	20
Phenanthrene	50	47.04	50	48.55	94	97	70-130	3	20
Phenol	50	29.98	50	29.29	60	59	20-160	2	20
Pyrene	50	46.76	50	48.96	94	98	70-130	5	20
2,3,4,6-Tetrachlorophenol	50	53.93	50	51.35	108	103	70-130	5	20
o-Toluidine	50	25.86	50	27.03	52*	54*	70-130	4	20
1,2,4-Trichlorobenzene	50	36.04	50	36.37	72	73	70-130	1	20
2,4,5-Trichlorophenol	50	54.75	50	54.1	109	108	70-130	1	20
2,4,6-Trichlorophenol	50	52.46	50	54.06	105	108	70-130	3	20

mg/kg mg/kg mg/kg mg/kg

Batch number: 173120570804

Sample number(s): 9304777-9304781,9304786-9304787,9304792

*- Outside of specification

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Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/18/2017 11:00

Group Number: 1872396

LCS/LCSD (continued)

Analysis Name	LCS Spike Added mg/kg	LCS Conc mg/kg	LCSD Spike Added mg/kg	LCSD Conc mg/kg	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Aluminum	200	215.66			108		80-120		
Calcium	400	400.49			100		80-120		
Iron	100	104.78			105		80-120		
Magnesium	200	204.33			102		80-120		
Potassium	1000	1029.02			103		80-120		
Sodium	1000	1018.61			102		80-120		
Zinc	50	50.95			102		80-120		
Batch number: 173120570804A	Sample number(s): 9304777-9304781,9304786-9304787,9304792								
Antimony	0.600	0.664			111		80-120		
Arsenic	1.00	0.965			97		80-120		
Beryllium	0.400	0.412			103		80-120		
Cadmium	0.500	0.540			108		80-120		
Chromium	5.00	4.95			99		80-120		
Cobalt	25	24.78			99		80-120		
Copper	5.00	5.41			108		80-120		
Lead	1.50	1.51			101		80-120		
Manganese	5.00	5.21			104		80-120		
Nickel	5.00	5.12			102		80-120		
Silver	5.00	5.29			106		80-120		
Thallium	0.200	0.202			101		80-120		
Vanadium	5.00	5.10			102		80-120		
Batch number: 173120570804B	Sample number(s): 9304777-9304781,9304786-9304787,9304792								
Selenium	1.00	1.02			102		80-120		
Batch number: 173120570804D	Sample number(s): 9304777-9304781,9304786-9304787,9304792								
Barium	5.00	5.22			104		80-120		
Batch number: 173120571101	Sample number(s): 9304777-9304781,9304786-9304787,9304792								
Mercury	0.100	0.0896			90		80-120		
	mg/l	mg/l	mg/l	mg/l					
Batch number: 173120570502	Sample number(s): 9304794								
Aluminum	2.00	1.78			89		80-120		
Calcium	4.00	3.57			89		80-120		
Iron	1.00	0.922			92		80-120		
Magnesium	2.00	1.85			92		80-120		
Potassium	10	8.99			90		80-120		
Sodium	10	8.95			89		80-120		
Zinc	0.500	0.494			99		80-120		
Batch number: 173120605006A	Sample number(s): 9304794								
Antimony	0.00600	0.00669			111		80-120		
Arsenic	0.0100	0.0108			108		80-120		
Beryllium	0.00400	0.00406			102		80-120		

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Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/18/2017 11:00

Group Number: 1872396

LCS/LCSD (continued)

Analysis Name	LCS Spike Added mg/l	LCS Conc mg/l	LCSD Spike Added mg/l	LCSD Conc mg/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Cadmium	0.00500	0.00535			107		80-120		
Chromium	0.0500	0.0503			101		80-120		
Cobalt	0.250	0.257			103		80-120		
Copper	0.0500	0.0527			105		80-120		
Lead	0.0150	0.0153			102		80-120		
Manganese	0.0500	0.0495			99		80-120		
Nickel	0.0500	0.0544			109		80-120		
Silver	0.0500	0.0505			101		80-120		
Thallium	0.00200	0.00190			95		80-120		
Vanadium	0.0500	0.0497			99		80-120		
Batch number: 173120605006B	Sample number(s): 9304794								
Selenium	0.0100	0.0101			101		80-120		
Batch number: 173120605006D	Sample number(s): 9304794								
Barium	0.0500	0.0501			100		80-120		
Batch number: 173130571303	Sample number(s): 9304794								
Mercury	0.00100	0.000905			90		80-120		
	mg/kg	mg/kg	mg/kg	mg/kg					
Batch number: 17321667631A	Sample number(s): 9304777,9304782-9304788								
Total Organic Carbon (TOC)	7150	7087.3			99		47-143		
Batch number: 17321667631B	Sample number(s): 9304778-9304781,9304791								
Total Organic Carbon (TOC)	7150	7087.3			99		47-143		
Batch number: 17325667631A	Sample number(s): 9304789,9304792								
Total Organic Carbon (TOC)	7150	8020.27			112		47-143		
Batch number: 17325667631B	Sample number(s): 9304790								
Total Organic Carbon (TOC)	7150	8020.27			112		47-143		
	mg/l	mg/l	mg/l	mg/l					
Batch number: 17317667604A	Sample number(s): 9304794								
Total Organic Carbon (Quad)	25	25.68			103		91-113		
	%	%	%	%					
Batch number: 17313820011A	Sample number(s): 9304777-9304792								
Moisture	89.5	89.31			100		99-101		
Moisture	89.5	89.31			100		99-101		
Moisture Duplicate	89.5	89.31			100		99-101		

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Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/18/2017 11:00

Group Number: 1872396

MS/MSD

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc ug/kg	MS Spike Added ug/kg	MS Conc ug/kg	MSD Spike Added ug/kg	MSD Conc ug/kg	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
Batch number: J173191AA										
Chlorodifluoroethane	1 U	18.45	19.17	17.83	20.15	104	113	70-130	5	30
Chlorodifluoromethane	2 U	18.45	20.04	17.83	19.61	109	110	70-130	2	30
Chlorofluoromethane	1 U	18.45	16.68	17.83	16.51	90	93	70-130	1	30
1,1-Dichloro-1-fluoroethane	1 U	18.45	18.01	17.83	16.78	98	94	70-130	7	30
1,2-Dichloro-1-fluoroethane	1 U	18.45	16.71	17.83	17.42	91	98	70-130	4	30
Dichlorotetrafluoroethane	2 U	18.45	17.97	17.83	19.53	97	110	70-130	8	30
1,2-Dichlorotrifluoroethane	1 U	18.45	17.26	17.83	17.04	94	96	70-130	1	30
Dichlorotrifluoroethane		2.37	18.45	17.89	17.83	84	93	70-130	6	30
Freon 113a	5 U	18.45	17.42	17.83	19.63	94	110	70-130	12	30
1,1,2-Trifluoroethane	2 U	18.45	17.42	17.83	16.32	94	92	70-130	7	30
Batch number: J173211AA										
Chlorodifluoroethane	1 U	23.15	26.32	23.04	28.2	114	122	70-130	7	30
Chlorodifluoromethane	2 U	23.15	31.86	23.04	35	138*	152*	70-130	9	30
Chlorofluoromethane	1 U	23.15	23.02	23.04	25.27	99	110	70-130	9	30
1,1-Dichloro-1-fluoroethane	1 U	23.15	30.67	23.04	31.3	133*	136*	70-130	2	30
1,2-Dichloro-1-fluoroethane	1 U	23.15	22.69	23.04	21.89	98	95	70-130	4	30
Dichlorotetrafluoroethane	2 U	23.15	26.31	23.04	28.49	114	124	70-130	8	30
1,2-Dichlorotrifluoroethane	1 U	23.15	26.22	23.04	27.13	113	118	70-130	3	30
Dichlorotrifluoroethane	1 U	23.15	24.9	23.04	26.94	108	117	70-130	8	30
Freon 113a	6 U	23.15	22.68	23.04	25.64	98	111	70-130	12	30
1,1,2-Trifluoroethane	2 U	23.15	24.67	23.04	28.28	107	123	70-130	14	30
Batch number: R173182AA										
Sample number(s): 9304778-9304780,9304786-9304792 UNSPK: 9304778										
Acetone	420 U	9375	9787.01	8865.26	9366.77	104	106	60-140	4	30
Benzene	30 U	1250	1257.74	1182.03	1173.7	101	99	70-130	7	30
Bromodichloromethane	60 U	1250	1241.69	1182.03	1138.07	99	96	70-130	9	30
2-Butanone	240 U	9375	7749.92	8865.26	6885.69	83	78	60-140	12	30
n-Butylbenzene	60 U	1250	1043.7	1182.03	1051.01	83	89	70-130	1	30
sec-Butylbenzene	60 U	1250	1084.86	1182.03	1042.8	87	88	70-130	4	30
tert-Butylbenzene	60 U	1250	1045.87	1182.03	1018.27	84	86	70-130	3	30
Carbon Disulfide	60 U	1250	928.75	1182.03	889.83	74	75	60-140	4	30
Carbon Tetrachloride	60 U	1250	1158.7	1182.03	1056.18	93	89	70-130	9	30
Chlorobenzene	6310.38	1250	3454.14	1182.03	5296.05	-227 (2)	-85 (2)	70-130	42*	30
Chloroethane	120 U	1250	903.95	1182.03	806.28	72	68	60-140	11	30
Chloroform	60 U	1250	1263.81	1182.03	1164.85	101	99	70-130	8	30
Chloromethane	120 U	1250	721.42	1182.03	640.76	58*	54*	60-140	12	30
2-Chlorotoluene	60 U	1250	1133.7	1182.03	1048.55	91	89	70-130	8	30
4-Chlorotoluene	60 U	1250	1112.81	1182.03	1002.68	89	85	70-130	10	30
Dibromochloromethane	60 U	1250	1095.29	1182.03	1044.63	88	88	70-130	5	30
1,2-Dibromoethane	60 U	1250	1132.44	1182.03	1084.41	91	92	70-130	4	30
1,2-Dichlorobenzene	560.5	1250	1230.89	1182.03	1392.71	54*	70	70-130	12	30

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Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/18/2017 11:00

Group Number: 1872396

MS/MSD (continued)

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc ug/kg	MS Spike Added ug/kg	MS Conc ug/kg	MSD Spike Added ug/kg	MSD Conc ug/kg	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
1,3-Dichlorobenzene	573.27	1250	1218.19	1182.03	1443.12	52*	74	70-130	17	30
1,4-Dichlorobenzene	2933.38	1250	1683.64	1182.03	3070.69	-99*	12*	70-130	58*	30
Dichlorodifluoromethane	120	U	1250	316.46	1182.03	244.14	25*	21*	60-140	26
1,1-Dichloroethane	60	U	1250	1228.32	1182.03	1113.54	98	94	70-130	10
1,2-Dichloroethane	60	U	1250	1270.48	1182.03	1211.97	102	103	70-130	5
1,1-Dichloroethene	60	U	1250	1052.1	1182.03	1010.44	84	85	70-130	4
cis-1,2-Dichloroethene	60	U	1250	1327.34	1182.03	1239.76	106	105	70-130	7
trans-1,2-Dichloroethene	60	U	1250	1179.84	1182.03	1113.68	94	94	70-130	6
1,2-Dichloroethene (Total)	60	U	2500	2507.17	2364.07	2353.43	100	100	70-130	6
Dichlorofluoromethane	120	U	1250	1166.01	1182.03	1135.48	93	96	70-130	3
1,2-Dichloropropane	60	U	1250	1307.19	1182.03	1202.87	105	102	70-130	8
1,1-Dichloropropene	60	U	1250	1132.54	1182.03	1039.3	91	88	70-130	9
cis-1,3-Dichloropropene	60	U	1250	1307.56	1182.03	1194.18	105	101	70-130	9
Ethylbenzene	60	U	1250	1104.83	1182.03	1050.04	88	89	70-130	5
Freon 113	120	U	1250	709.35	1182.03	716.84	57*	61*	70-130	1
n-Hexane	60	U	1250	530.29	1182.03	537.49	42*	45*	70-130	1
2-Hexanone	180	U	6250	5620.11	5910.17	5135.12	90	87	60-140	9
Isobutyl Alcohol	6,000	U	31250	25987.55	29550.85	23437.24	83	79	70-130	10
Isopropylbenzene	343.38	1250	1241.69	1182.03	1259.42	72	77	70-130	1	30
p-Isopropyltoluene	60	U	1250	1098.14	1182.03	1069.03	88	90	70-130	3
Methacrylonitrile	300	U	9375	10224.99	8865.26	9333.48	109	105	70-130	9
Methyl Methacrylate	60	U	1250	1252.03	1182.03	1101.9	100	93	70-130	13
Methyl Tertiary Butyl Ether	30	U	1250	1330.37	1182.03	1209.57	106	102	70-130	10
4-Methyl-2-pentanone	180	U	6250	6723.67	5910.17	6142.25	108	104	60-140	9
Methylene Chloride	120	U	1250	1294.51	1182.03	1205.5	104	102	70-130	7
Propionitrile	1,800	U	9375	10080.25	8865.26	9223.21	108	104	70-130	9
n-Propylbenzene	60	U	1250	1051.13	1182.03	996.21	84	84	70-130	5
Styrene	60	U	1250	1052.66	1182.03	1002.09	84	85	70-130	5
1,1,1,2-Tetrachloroethane	60	U	1250	1146.21	1182.03	1064.38	92	90	70-130	7
1,1,2,2-Tetrachloroethane	60	U	1250	1126.73	1182.03	1013.15	90	86	70-130	11
Tetrachloroethene	60	U	1250	1107.39	1182.03	1001.98	89	85	70-130	10
Tetrahydrofuran	240	U	6250	5584.37	5910.17	5048.7	89	85	70-130	10
Toluene	60	U	1250	1161.59	1182.03	1104.71	93	93	70-130	5
1,1,1-Trichloroethane	60	U	1250	1231.61	1182.03	1136.09	99	96	70-130	8
1,1,2-Trichloroethane	60	U	1250	1189.72	1182.03	1093.67	95	93	70-130	8
Trichloroethene	60	U	1250	1248.87	1182.03	1098.97	100	93	70-130	13
Trichlorofluoromethane	120	U	1250	750.45	1182.03	685.81	60	58*	60-140	9
1,2,4-Trimethylbenzene	60	U	1250	1091.71	1182.03	1043.81	87	88	70-130	4
1,3,5-Trimethylbenzene	60	U	1250	1091.89	1182.03	1010.53	87	85	70-130	8
Vinyl Chloride	60	U	1250	696.16	1182.03	596.72	56*	50*	70-130	15
m+p-Xylene	116.61	2500	2274.44	2364.07	2190.98	86	88	70-130	4	30
o-Xylene	96.65	1250	1125.24	1182.03	1093.22	82	84	70-130	3	30
Xylene (Total)	213.26	3750	3399.67	3546.1	3284.2	85	87	70-130	3	30

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Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/18/2017 11:00

Group Number: 1872396

MS/MSD (continued)

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked	MS Spike	MS	MSD Spike	MSD	MS	MSD	MS/MSD	RPD	RPD
	Conc	Added	Conc	Added	Conc	%Rec	%Rec	Limits		Max
	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg					
Batch number: 17314SLH026	Sample number(s): 9304777 UNSPK: P302536									
Acenaphthene	3	U	1640.96	1712.55	1665	1744.9	104	105	70-130	2
Acenaphthylene	3	U	1640.96	1686.32	1665	1689.39	103	101	70-130	0
Acetophenone	16	U	1640.96	1574.31	1665	1623.98	96	98	70-130	3
4-Aminobiphenyl	160	U	1640.96	2043.77	1665	2549.08	125	153*	70-130	22
Aniline	160	U	1640.96	1002.55	1665	1265.16	61	76	20-160	23
Anthracene	3	U	1640.96	1682.94	1665	1737.43	103	104	70-130	3
Benzidine	250	U	8204.79	2577.2	8325.01	2742.19	31	33	20-160	6
Benzo(a)anthracene	3	U	1640.96	1515.26	1665	1596.46	92	96	70-130	5
Benzo(a)pyrene	3	U	1640.96	1553.33	1665	1601.67	95	96	70-130	3
Benzo(b)fluoranthene	3	U	1640.96	1740.97	1665	1671.77	106	100	70-130	4
Benzo(g,h,i)perylene	3	U	1640.96	1689.79	1665	1751.17	103	105	70-130	4
Benzo(k)fluoranthene	3	U	1640.96	1591.22	1665	1744.8	97	105	70-130	9
1,1'-Biphenyl	16	U	1640.96	1651.25	1665	1677.7	101	101	70-130	2
4-Bromophenyl-phenylether	16	U	1640.96	1675.46	1665	1715.4	102	103	70-130	2
Butylbenzylphthalate	66	U	1640.96	1692.93	1665	1760.22	103	106	70-130	4
Di-n-butylphthalate	66	U	1640.96	1656.24	1665	1719.33	101	103	70-130	4
Carbazole	16	U	1640.96	1610.8	1665	1683.35	98	101	70-130	4
4-Chloro-3-methylphenol	16	U	1640.96	1730.92	1665	1742.54	105	105	70-130	1
4-Chloroaniline	33	U	1640.96	496.11	1665	823.35	30*	49*	70-130	50*
bis(2-Chloroethoxy)methane	16	U	1640.96	1591.45	1665	1588.44	97	95	70-130	0
bis(2-Chloroethyl)ether	16	U	1640.96	1504.3	1665	1555.71	92	93	70-130	3
2-Chloronaphthalene	7	U	1640.96	1606.35	1665	1661.48	98	100	70-130	3
2-Chlorophenol	16	U	1640.96	1712.21	1665	1732.23	104	104	70-130	1
4-Chlorophenyl-phenylether	16	U	1640.96	1653	1665	1660.52	101	100	70-130	0
2,2'-oxybis(1-Chloropropane)	16	U	1640.96	1516.89	1665	1533.07	92	92	70-130	1
Chrysene	3	U	1640.96	1538.97	1665	1583.1	94	95	70-130	3
Dibenz(a,h)anthracene	3	U	1640.96	1707.7	1665	1764.97	104	106	70-130	3
Dibenzo[furan	16	U	1640.96	1663.33	1665	1682.9	101	101	70-130	1
3,3'-Dichlorobenzidine	99	U	1640.96	1025.53	1665	1240.55	62*	75	70-130	19
2,4-Dichlorophenol	16	U	1640.96	1732.49	1665	1731.59	106	104	70-130	0
Diethylphthalate	66	U	1640.96	1634.91	1665	1669.01	100	100	70-130	2
2,4-Dimethylphenol	16	U	1640.96	1411.33	1665	1435.68	86	86	70-130	2
Dimethylphthalate	66	U	1640.96	1660.67	1665	1689.65	101	101	70-130	2
4,6-Dinitro-2-methylphenol	160	U	1640.96	1545.13	1665	1664.4	94	100	70-130	7
2,4-Dinitrophenol	300	U	3281.92	3263.82	3330	3331	99	100	20-160	2
2,4-Dinitrotoluene	66	U	1640.96	1728.62	1665	1705.04	105	102	70-130	1
2,6-Dinitrotoluene	16	U	1640.96	1782.85	1665	1788.01	109	107	70-130	0
1,4-Dioxane	99	U	1640.96	1099.01	1665	1000.2	67	60	20-160	9
Diphenyl ether	16	U	1640.96	1534.13	1665	1539.57	93	92	70-130	0
1,2-Diphenylhydrazine	16	U	1640.96	1674.87	1665	1745.66	102	105	70-130	4

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Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/18/2017 11:00

Group Number: 1872396

MS/MSD (continued)

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc ug/kg	MS Spike Added ug/kg	MS Conc ug/kg	MSD Spike Added ug/kg	MSD Conc ug/kg	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
bis(2-Ethylhexyl)phthalate	66 U	1640.96	1643.98	1665	1742.12	100	105	70-130	6	30
Fluoranthene	3 U	1640.96	1621.45	1665	1703.02	99	102	70-130	5	30
Fluorene	3 U	1640.96	1649.52	1665	1664.42	101	100	70-130	1	30
Hexachlorobenzene	3 U	1640.96	1663.3	1665	1684.73	101	101	70-130	1	30
Hexachlorobutadiene	16 U	1640.96	1655.66	1665	1601.04	101	96	70-130	3	30
Hexachlorocyclopentadiene	160 U	3281.92	1729.4	3330	1724.71	53	52	20-160	0	30
Hexachloroethane	33 U	1640.96	1518.39	1665	1550.9	93	93	20-160	2	30
Indeno(1,2,3-cd)pyrene	3 U	1640.96	1728.53	1665	1787.21	105	107	70-130	3	30
Isophorone	16 U	1640.96	1563.93	1665	1606.12	95	96	70-130	3	30
2-Methylnaphthalene	3 U	1640.96	1654.57	1665	1649.93	101	99	70-130	0	30
2-Methylphenol	16 U	1640.96	1666.03	1665	1737.01	102	104	70-130	4	30
4-Methylphenol	16 U	1640.96	1594.92	1665	1650.21	97	99	20-160	3	30
Naphthalene	3 U	1640.96	1673.26	1665	1657.19	102	100	70-130	1	30
1-Naphthylamine	160 U	3281.92	1642.3	3330	1947.64	50*	58*	70-130	17	30
2-Naphthylamine	160 U	3281.92	989.36	3330	1280.52	30*	38*	70-130	26	30
2-Nitroaniline	16 U	1640.96	1748.23	1665	1774.93	107	107	70-130	2	30
3-Nitroaniline	66 U	1640.96	1403.55	1665	1574.95	86	95	70-130	12	30
4-Nitroaniline	66 U	1640.96	1473.8	1665	1518.27	90	91	70-130	3	30
Nitrobenzene	16 U	1640.96	1697.36	1665	1674.97	103	101	70-130	1	30
2-Nitrophenol	16 U	1640.96	1710.61	1665	1723.28	104	104	70-130	1	30
4-Nitrophenol	160 U	1640.96	1573.18	1665	1594.39	96	96	20-160	1	30
N-Nitrosodimethylamine	66 U	1640.96	1569.34	1665	1618.51	96	97	20-160	3	30
N-Nitroso-di-n-propylamine	16 U	1640.96	1522.21	1665	1568.03	93	94	70-130	3	30
N-Nitrosodiphenylamine	16 U	1640.96	1625.55	1665	1670.5	99	100	70-130	3	30
Di-n-octylphthalate	66 U	1640.96	1864.96	1665	1889.95	114	114	70-130	1	30
Parathion	160 U	1640.96	1688.2	1665	1727.52	103	104	20-160	2	30
Pentachlorobenzene	16 U	1640.96	1585.34	1665	1609.47	97	97	20-160	2	30
Pentachlorophenol	33 U	1640.96	1677.49	1665	1727.33	102	104	20-160	3	30
Phenanthrene	3 U	1640.96	1621.15	1665	1683.9	99	101	70-130	4	30
Phenol	16 U	1640.96	1699.31	1665	1764.61	104	106	20-160	4	30
Pyrene	3 U	1640.96	1584.62	1665	1623.36	97	97	70-130	2	30
2,3,4,6-Tetrachlorophenol	66 U	1640.96	1686.07	1665	1758.68	103	106	70-130	4	30
o-Toluidine	200 U	1640.96	782.1	1665	1139.2	48*	68*	70-130	37*	30
1,2,4-Trichlorobenzene	16 U	1640.96	1637.81	1665	1617.15	100	97	70-130	1	30
2,4,5-Trichlorophenol	16 U	1640.96	1701.75	1665	1725.5	104	104	70-130	1	30
2,4,6-Trichlorophenol	16 U	1640.96	1821.94	1665	1842.33	111	111	70-130	1	30
Batch number: 17317SLE026	Sample number(s): 9304778-9304780,9304782-9304792 UNSPK: 9304778									
Acenaphthene	89.85	1661.68	1043.79	1640.42	1211.84	57*	68*	70-130	15	30
Acenaphthylene	38.39	1661.68	892.6	1640.42	1092.72	51*	64*	70-130	20	30
Acetophenone	82 U	1661.68	1060.47	1640.42	1130.17	64*	69*	70-130	6	30
4-Aminobiphenyl	820 U	1661.68	830 U	1640.42	820 U	0*	0*	70-130	0	30
Aniline	820 U	1661.68	830 U	1640.42	820 U	0*	0*	20-160	0	30

*- Outside of specification

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(2) The unspiked result was more than four times the spike added.

is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC

Group Number: 1872396

Reported: 12/18/2017 11:00

MS/MSD (continued)

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc ug/kg	MS Spike Added ug/kg	MS Conc ug/kg	MSD Spike Added ug/kg	MSD Conc ug/kg	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
Anthracene	68.94	1661.68	885.64	1640.42	1134.44	49*	65*	70-130	25	30
Benzidine	1,200 U	8308.41	1,200 U	8202.1	1,200 U	0*	0*	20-160	0	30
Benzo(a)anthracene	67.76	1661.68	790.26	1640.42	1024.98	43*	58*	70-130	26	30
Benzo(a)pyrene	52.38	1661.68	569.2	1640.42	825.85	31*	47*	70-130	37*	30
Benzo(b)fluoranthene	71.81	1661.68	734.07	1640.42	944.9	40*	53*	70-130	25	30
Benzo(g,h,i)perylene	32.19	1661.68	520.27	1640.42	738.1	29*	43*	70-130	35*	30
Benzo(k)fluoranthene	38.85	1661.68	722.77	1640.42	936.19	41*	55*	70-130	26	30
1,1'-Biphenyl	313.18	1661.68	1342.59	1640.42	1297.77	62*	60*	70-130	3	30
4-Bromophenyl-phenylether	82 U	1661.68	1013.97	1640.42	1161.39	61*	71	70-130	14	30
Butylbenzylphthalate	330 U	1661.68	1325.54	1640.42	1493.96	80	91	70-130	12	30
Di-n-butylphthalate	330 U	1661.68	1077.11	1640.42	1159.7	65*	71	70-130	7	30
Carbazole	82 U	1661.68	915.91	1640.42	1010.79	55*	62*	70-130	10	30
4-Chloro-3-methylphenol	82 U	1661.68	1127.78	1640.42	1199.41	68*	73	70-130	6	30
4-Chloroaniline	1825.66	1661.68	2685.32	1640.42	2806.12	52*	60*	70-130	4	30
bis(2-Chloroethoxy)methane	82 U	1661.68	977.88	1640.42	1108.02	59*	68*	70-130	12	30
bis(2-Chloroethyl)ether	82 U	1661.68	1031.29	1640.42	1160.68	62*	71	70-130	12	30
2-Chloronaphthalene	33 U	1661.68	1021.43	1640.42	1196.29	61*	73	70-130	16	30
2-Chlorophenol	82 U	1661.68	1053.35	1640.42	1142.54	63*	70	70-130	8	30
4-Chlorophenyl-phenylether	82 U	1661.68	985.83	1640.42	1101.34	59*	67*	70-130	11	30
2,2'-oxybis(1-Chloropropane)	82 U	1661.68	1085.41	1640.42	1225.82	65*	75	70-130	12	30
Chrysene	99.19	1661.68	837.89	1640.42	1070.73	44*	59*	70-130	24	30
Dibenz(a,h)anthracene	16 U	1661.68	572.65	1640.42	787.65	34*	48*	70-130	32*	30
Dibenzofuran	82 U	1661.68	993.13	1640.42	1145.76	60*	70	70-130	14	30
3,3'-Dichlorobenzidine	490 U	1661.68	500 U	1640.42	490 U	0*	0*	70-130	0	30
2,4-Dichlorophenol	82 U	1661.68	1008.81	1640.42	1134.76	61*	69*	70-130	12	30
Diethylphthalate	330 U	1661.68	871.65	1640.42	942.22	52*	57*	70-130	8	30
2,4-Dimethylphenol	82 U	1661.68	893.8	1640.42	1000.47	54*	61*	70-130	11	30
Dimethylphthalate	330 U	1661.68	1002.44	1640.42	1095.79	60*	67*	70-130	9	30
4,6-Dinitro-2-methylphenol	820 U	1661.68	830 U	1640.42	820 U	0*	0*	70-130	0	30
2,4-Dinitrophenol	1,500 U	3323.36	1,500 U	3280.84	1,500 U	0*	0*	20-160	0	30
2,4-Dinitrotoluene	330 U	1661.68	563.98	1640.42	906.41	34*	55*	70-130	47*	30
2,6-Dinitrotoluene	82 U	1661.68	738.45	1640.42	1002.28	44*	61*	70-130	30	30
1,4-Dioxane	490 U	1661.68	769.89	1640.42	857.54	46	52	20-160	11	30
Diphenyl ether	287.28	1661.68	1291.83	1640.42	1248.44	60*	59*	70-130	3	30
1,2-Diphenylhydrazine	82 U	1661.68	1141.27	1640.42	1292.11	69*	79	70-130	12	30
bis(2-Ethylhexyl)phthalate	541.43	1661.68	1655.75	1640.42	1531.98	67*	60*	70-130	8	30
Fluoranthene	150.9	1661.68	985.27	1640.42	1142.06	50*	60*	70-130	15	30
Fluorene	90.06	1661.68	1009.27	1640.42	1162.62	55*	65*	70-130	14	30
Hexachlorobenzene	16 U	1661.68	958.69	1640.42	1118.41	58*	68*	70-130	15	30
Hexachlorobutadiene	82 U	1661.68	968.02	1640.42	1092.54	58*	67*	70-130	12	30
Hexachlorocyclopentadiene	820 U	3323.36	830 U	3280.84	820 U	0*	0*	20-160	0	30

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Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/18/2017 11:00

Group Number: 1872396

MS/MSD (continued)

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc ug/kg	MS Spike Added ug/kg	MS Conc ug/kg	MSD Spike Added ug/kg	MSD Conc ug/kg	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
Hexachloroethane	160 U	1661.68	170 U	1640.42	160 U	0*	0*	20-160	0	30
Indeno(1,2,3-cd)pyrene	26.05	1661.68	513.74	1640.42	752.36	29*	44*	70-130	38*	30
Isophorone	82 U	1661.68	978.13	1640.42	1087.26	59*	66*	70-130	11	30
2-Methylnaphthalene	272.66	1661.68	1205.13	1640.42	1310.64	56*	63*	70-130	8	30
2-Methylphenol	82 U	1661.68	1075.23	1640.42	1242.4	65*	76	70-130	14	30
4-Methylphenol	101.82	1661.68	1056.23	1640.42	1229.03	57	69	20-160	15	30
Naphthalene	515.51	1661.68	1480.15	1640.42	1514.09	58*	61*	70-130	2	30
1-Naphthylamine	820 U	3323.36	830 U	3280.84	820 U	0*	0*	70-130	0	30
2-Naphthylamine	820 U	3323.36	830 U	3280.84	820 U	0*	0*	70-130	0	30
2-Nitroaniline	82 U	1661.68	1493.59	1640.42	1531.45	90	93	70-130	3	30
3-Nitroaniline	330 U	1661.68	640.33	1640.42	642.3	39*	39*	70-130	0	30
4-Nitroaniline	330 U	1661.68	779.97	1640.42	979.35	47*	60*	70-130	23	30
Nitrobenzene	82 U	1661.68	1049.47	1640.42	1137.15	63*	69*	70-130	8	30
2-Nitrophenol	82 U	1661.68	309.73	1640.42	655.14	19*	40*	70-130	72*	30
4-Nitrophenol	820 U	1661.68	942.37	1640.42	1130.24	57	69	20-160	18	30
N-Nitrosodimethylamine	330 U	1661.68	975.45	1640.42	1104.38	59	67	20-160	12	30
N-Nitroso-di-n-propylamine	82 U	1661.68	1032.61	1640.42	1143.27	62*	70	70-130	10	30
N-Nitrosodiphenylamine	82 U	1661.68	1013.7	1640.42	1080.04	61*	66*	70-130	6	30
Di-n-octylphthalate	330 U	1661.68	1123.48	1640.42	1177.26	68*	72	70-130	5	30
Parathion	820 U	1661.68	1074.81	1640.42	1095.54	65	67	20-160	2	30
Pentachlorobenzene	82 U	1661.68	953.65	1640.42	1072.11	57	65	20-160	12	30
Pentachlorophenol	160 U	1661.68	653.72	1640.42	861.99	39	53	20-160	27	30
Phenanthrene	210.05	1661.68	1116.51	1640.42	1211.82	55*	61*	70-130	8	30
Phenol	92.25	1661.68	1092.81	1640.42	1231.44	60	69	20-160	12	30
Pyrene	167.69	1661.68	990.11	1640.42	1106.01	49*	57*	70-130	11	30
2,3,4,6-Tetrachlorophenol	330 U	1661.68	891.88	1640.42	1016.45	54*	62*	70-130	13	30
o-Toluidine	990 U	1661.68	1,000 U	1640.42	980 U	0*	0*	70-130	0	30
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg					

Batch number: 173120570804

Sample number(s): 9304777-9304781,9304786-9304787,9304792 UNSPK: 9304778

Aluminum

11344.22 170.94 14677.59 160 13732.97 1950 (2) 1493 (2) 75-125 7 20

Calcium

1945.71 341.88 2453.01 320 2428.13 148 (2) 151 (2) 75-125 1 20

Iron

16280.69 85.47 17502.95 80 16864.91 1430 (2) 730 (2) 75-125 4 20

Magnesium

2856.29 170.94 3176.23 160 3362.91 187 (2) 317 (2) 75-125 6 20

Potassium

1753.22 854.7 3217.6 800 3127.71 171* 172* 75-125 3 20

Sodium

428.72 854.7 1266.47 800 1282.18 98 107 75-125 1 20

Zinc

153.71 42.74 240.25 40 171.26 202* 44* 75-125 34* 20

Batch number: 173120570804A

Sample number(s): 9304777-9304781,9304786-9304787,9304792 UNSPK: 9304778

*- Outside of specification

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(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/18/2017 11:00

Group Number: 1872396

MS/MSD (continued)

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc mg/kg	MS Spike Added mg/kg	MS Conc mg/kg	MSD Spike Added mg/kg	MSD Conc mg/kg	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
Antimony	0.484	1.03	1.32	0.960	1.24	82	79	75-125	7	20
Arsenic	8.64	1.71	10.35	1.60	9.45	100 (2)	50 (2)	75-125	9	20
Beryllium	0.574	0.684	1.17	0.640	1.10	87	82	75-125	6	20
Cadmium	0.915	0.855	1.54	0.800	1.52	74*	76	75-125	1	20
Chromium	34.42	8.55	45.04	8.00	43.46	124 (2)	113 (2)	75-125	4	20
Cobalt	7.97	42.74	48.49	40	45.12	95	93	75-125	7	20
Copper	32.96	8.55	42.31	8.00	42.67	109	121 (2)	75-125	1	20
Lead	48.15	2.56	56.44	2.40	63.55	323 (2)	642 (2)	75-125	12	20
Manganese	472.5	8.55	467.83	8.00	407.53	-55 (2)	-812 (2)	75-125	14	20
Nickel	19.29	8.55	26.84	8.00	25.5	88	78	75-125	5	20
Silver	0.526	8.55	8.95	8.00	8.43	99	99	75-125	6	20
Thallium	0.125	0.342	0.416	0.320	0.391	85	83	75-125	6	20
Vanadium	29.98	8.55	41.03	8.00	40.5	129*	132*	75-125	1	20
Batch number: 173120570804B	Sample number(s): 9304777-9304781,9304786-9304787,9304792 UNSPK: 9304778									
Selenium	0.460	1.71	2.17	1.60	2.10	100	103	75-125	3	20
Batch number: 173120570804D	Sample number(s): 9304777-9304781,9304786-9304787,9304792 UNSPK: 9304778									
Barium	64.45	8.55	68.42	8.00	64.99	46 (2)	7 (2)	75-125	5	20
Batch number: 173120571101	Sample number(s): 9304777-9304781,9304786-9304787,9304792 UNSPK: 9304778									
Mercury	0.182	0.156	0.361	0.164	0.314	115	81	80-120	14	20
	mg/l	mg/l	mg/l	mg/l	mg/l					
Batch number: 173120570502	Sample number(s): 9304794 UNSPK: P297281									
Aluminum	1.13	2.00	4.97	2.00	2.53	192*	70*	75-125	65*	20
Calcium	10.72	4.00	14.99	4.00	13.97	107	81	75-125	7	20
Iron	25.04	1.00	25.35	1.00	18.06	31 (2)	-699 (2)	75-125	34*	20
Magnesium	12.89	2.00	14.81	2.00	13.01	96 (2)	6 (2)	75-125	13	20
Potassium	4.10	10	14.13	10	14.04	100	99	75-125	1	20
Sodium	66.5	10	79.1	10	79.95	126 (2)	135 (2)	75-125	1	20
Zinc	0.121	0.500	0.736	0.500	0.601	123	96	75-125	20	20
Batch number: 173120605006A	Sample number(s): 9304794 UNSPK: P304760									
Antimony	0.00045 U	0.00600	0.00623	0.00600	0.00562	104	94	75-125	10	20
Arsenic	0.00072 U	0.0100	0.0105	0.0100	0.0105	105	105	75-125	0	20
Beryllium	0.000071 U	0.00400	0.00403	0.00400	0.00413	101	103	75-125	3	20
Cadmium	0.00015 U	0.00500	0.00463	0.00500	0.00502	93	100	75-125	8	20
Chromium	0.00270	0.0500	0.0537	0.0500	0.0521	102	99	75-125	3	20
Cobalt	0.00016 U	0.250	0.251	0.250	0.244	100	97	75-125	3	20
Copper	0.00054 U	0.0500	0.0525	0.0500	0.0496	105	99	75-125	6	20
Lead	0.00011 U	0.0150	0.0147	0.0150	0.0152	98	101	75-125	3	20
Manganese	0.00090 U	0.0500	0.0490	0.0500	0.0466	98	93	75-125	5	20

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Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/18/2017 11:00

Group Number: 1872396

MS/MSD (continued)

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc mg/l	MS Spike Added mg/l	MS Conc mg/l	MSD Spike Added mg/l	MSD Conc mg/l	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
Nickel	0.00197	0.0500	0.0520	0.0500	0.0523	100	101	75-125	0	20
Silver	0.00015 U	0.0500	0.0503	0.0500	0.0515	101	103	75-125	2	20
Thallium	0.00012 U	0.00200	0.00199	0.00200	0.00201	99	100	75-125	1	20
Vanadium	0.000297	0.0500	0.0509	0.0500	0.0502	101	100	75-125	1	20
Batch number: 173120605006B	Sample number(s): 9304794 UNSPK: P304760									
Selenium	0.00288	0.0100	0.0125	0.0100	0.0129	96	100	75-125	3	20
Batch number: 173120605006D	Sample number(s): 9304794 UNSPK: P304760									
Barium	0.0539	0.0500	0.0987	0.0500	0.102	90	96	75-125	3	20
Batch number: 173130571303	Sample number(s): 9304794 UNSPK: P299922									
Mercury	0.000050 U	0.00100	0.000922	0.00100	0.000901	92	90	80-120	2	20
mg/kg										
Batch number: 17321667631A	Sample number(s): 9304777,9304782-9304788 UNSPK: P302536									
Total Organic Carbon (TOC)	479.49	11850	14421.18	12240	15467.54	118	122	47-143	7	20
Batch number: 17321667631B	Sample number(s): 9304778-9304781,9304791 UNSPK: 9304778									
Total Organic Carbon (TOC)	20819.86	100320	144916.39	90630	129607.25	124	120	47-143	11	20
Batch number: 17325667631A	Sample number(s): 9304789,9304792 UNSPK: 9304789									
Total Organic Carbon (TOC)	202.92	9750	14453.1				146*		47-143	
Batch number: 17325667631B	Sample number(s): 9304790 UNSPK: 9304790									
Total Organic Carbon (TOC)	314.54	7800	11989.61				150*		47-143	
mg/l										
Batch number: 17317667604A	Sample number(s): 9304794 UNSPK: P302105									
Total Organic Carbon (Quad)	0.50 U	10	10.3	10	10.58	103	106	91-113	3	20

Laboratory Duplicate

Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	BKG Conc mg/kg	DUP Conc mg/kg	DUP RPD	DUP RPD Max
Batch number: 173120570804	11344.22	11119.89	2	20

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Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/18/2017 11:00

Group Number: 1872396

Laboratory Duplicate (continued)

Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	BKG Conc mg/kg	DUP Conc mg/kg	DUP RPD	DUP RPD Max
Calcium	1945.71	1895.08	3	20
Iron	16280.69	16286.49	0	20
Magnesium	2856.29	2824.51	1	20
Potassium	1753.22	1692.12	4	20
Sodium	428.72	425.32	1	20
Zinc	153.71	155.02	1	20
Batch number: 173120570804A	Sample number(s): 9304777-9304781,9304786-9304787,9304792 BKG: 9304778			
Antimony	0.484	0.428	12 (1)	20
Arsenic	8.64	8.27	4	20
Beryllium	0.574	0.577	1	20
Cadmium	0.915	0.871	5	20
Chromium	34.42	37.5	9	20
Cobalt	7.97	8.08	1	20
Copper	32.96	32.65	1	20
Lead	48.15	51.4	7	20
Manganese	472.5	506.23	7	20
Nickel	19.29	19.05	1	20
Silver	0.526	0.471	11	20
Thallium	0.125	0.130	4 (1)	20
Vanadium	29.98	32.63	8	20
Batch number: 173120570804B	Sample number(s): 9304777-9304781,9304786-9304787,9304792 BKG: 9304778			
Selenium	0.460	0.482	5 (1)	20
Batch number: 173120570804D	Sample number(s): 9304777-9304781,9304786-9304787,9304792 BKG: 9304778			
Barium	64.45	59.12	9	20
Batch number: 173120571101	Sample number(s): 9304777-9304781,9304786-9304787,9304792 BKG: 9304778			
Mercury	0.182	0.192	5 (1)	20
Batch number: 173120570502	Sample number(s): 9304794 BKG: P297281			
Aluminum	1.13	1.18	4	20
Calcium	10.72	10.82	1	20
Iron	25.04	25.41	1	20
Magnesium	12.89	13.06	1	20
Potassium	4.10	4.14	1	20
Sodium	66.5	67.72	2	20
Zinc	0.121	0.120	1	20
Batch number: 173120605006A	Sample number(s): 9304794 BKG: P304760			
Antimony	0.00045 U	0.00045 U	0 (1)	20
Arsenic	0.00072 U	0.00072 U	0 (1)	20
Beryllium	0.000071 U	0.000071 U	0 (1)	20

*- Outside of specification

**-This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/18/2017 11:00

Group Number: 1872396

Laboratory Duplicate (continued)

Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	BKG Conc mg/l	DUP Conc mg/l	DUP RPD	DUP RPD Max
Cadmium	0.00015 U	0.00015 U	0 (1)	20
Chromium	0.00270	0.00310	14 (1)	20
Cobalt	0.00016 U	0.00016 U	0 (1)	20
Copper	0.00054 U	0.00054 U	0 (1)	20
Lead	0.00011 U	0.00011 U	0 (1)	20
Manganese	0.00090 U	0.000919	200* (1)	20
Nickel	0.00197	0.00204	4 (1)	20
Silver	0.00015 U	0.00015 U	0 (1)	20
Thallium	0.00012 U	0.00012 U	0 (1)	20
Vanadium	0.000297	0.000338	13 (1)	20
Batch number: 173120605006B	Sample number(s): 9304794 BKG: P304760			
Selenium	0.00288	0.00308	7 (1)	20
Batch number: 173120605006D	Sample number(s): 9304794 BKG: P304760			
Barium	0.0539	0.0541	0	20
Batch number: 173130571303	Sample number(s): 9304794 BKG: P299922			
Mercury	0.000050 U	0.000050 U	0 (1)	20
	mg/kg	mg/kg		
Batch number: 17321667631A	Sample number(s): 9304777,9304782-9304788 BKG: P302536			
Total Organic Carbon (TOC)	479.49	373.64	25* (1)	7
Batch number: 17321667631B	Sample number(s): 9304778-9304781,9304791 BKG: 9304778			
Total Organic Carbon (TOC)	20819.86	22250.29	7	7
Batch number: 17325667631A	Sample number(s): 9304789,9304792 BKG: 9304789			
Total Organic Carbon (TOC)	202.92	209.82	3 (1)	7
Batch number: 17325667631B	Sample number(s): 9304790 BKG: 9304790			
Total Organic Carbon (TOC)	314.54	325.87	4 (1)	7
	%	%		
Batch number: 17313820011A	Sample number(s): 9304777-9304792 BKG: 9304778, P304778			
Moisture	54.65	48.18	13*	5
Moisture	54.65	48.18	13*	5
Moisture Duplicate	54.65	48.18	13*	5

Surrogate Quality Control

*- Outside of specification

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(2) The unspiked result was more than four times the spike added.

is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC

Group Number: 1872396

Reported: 12/18/2017 11:00

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report. For dual column analyses, the surrogate (at least one surrogate for multi-surrogate tests) must be within the acceptance limits on at least one of the two columns.

Analysis Name: TCL Volatiles + Add'l Cmpds

Batch number: A173212AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
9304777	103	98	121	82
Blank	106	101	109	95
LCS	108	100	112	101
LCSD	98	94	112	100
Limits:	70-130	70-130	70-130	70-130

Analysis Name: Freons

Batch number: J173191AA

	1,2-Dichloroethane-d4	Fluorobenzene
9304777	103	102
9304782	115	113
9304783	102	100
9304784	104	101
Blank	99	100
LCS	101	100
LCSD	98	100
MS	98	97
MSD	103	107
Limits:	70-130	70-130

Analysis Name: Freons

Batch number: J173201AA

	1,2-Dichloroethane-d4	Fluorobenzene
9304793	104	105
9304794	109	110
Blank	106	107
LCS	107	107
LCSD	110	107
Limits:	70-130	70-130

Analysis Name: Freons

Batch number: J173211AA

	1,2-Dichloroethane-d4	Fluorobenzene
9304778	100	99
9304779	103	105
9304780	97	93
9304786	97	98
9304787	100	99

*- Outside of specification

**-This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/18/2017 11:00

Group Number: 1872396

Surrogate Quality Control (continued)

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report. For dual column analyses, the surrogate (at least one surrogate for multi-surrogate tests) must be within the acceptance limits on at least one of the two columns.

Analysis Name: Freons

Batch number: J173211AA

	1,2-Dichloroethane-d4	Fluorobenzene
9304788	99	97
9304789	99	97
9304790	101	99
9304791	100	102
9304792	99	97
Blank	96	100
LCS	100	98
LCSD	98	101
MS	103	105
MSD	97	93

Limits: 70-130 70-130

Analysis Name: Freons

Batch number: J173251AA

	1,2-Dichloroethane-d4	Fluorobenzene
9304785	95	93
Blank	95	93
LCS	91	91
LCSD	96	93

Limits: 70-130 70-130

Analysis Name: TCL Volatiles + Add'l Cmpds

Batch number: R173182AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
9304778	69*	75	58*	44*
9304779	77	80	63*	57*
9304780	77	79	65*	55*
9304787	69*	73	55*	44*
Blank	97	103	88	91
LCS	101	102	94	95
LCSD	100	100	86	90
MS	77	80	63*	57*
MSD	77	79	65*	55*

Limits: 70-130 70-130 70-130 70-130

Analysis Name: TCL Volatiles + Add'l Cmpds

Batch number: X173182AA

*- Outside of specification

**-This limit was used in the evaluation of the final result for the blank

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(2) The unspiked result was more than four times the spike added.

is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/18/2017 11:00

Group Number: 1872396

Surrogate Quality Control (continued)

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report. For dual column analyses, the surrogate (at least one surrogate for multi-surrogate tests) must be within the acceptance limits on at least one of the two columns.

Analysis Name: TCL Volatiles + Add'l Cmpds

Batch number: X173182AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
9304782	111	110	90	89
9304783	109	107	89	90
9304784	111	108	90	86
9304785	111	106	91	90
9304786	111	104	101	80
9304788	112	109	90	90
9304789	112	110	92	87
9304790	112	108	89	89
9304791	110	104	90	88
9304792	114	108	89	88
Blank	110	106	92	87
LCS	103	101	96	100
LCSD	101	103	94	99
Limits:	70-130	70-130	70-130	70-130

Analysis Name: TCL Volatiles + Add'l Cmpds

Batch number: Y173182AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
9304793	96	102	98	94
9304794	95	103	99	95
Blank	93	103	99	95
LCS	93	99	101	101
LCSD	93	100	101	101
Limits:	70-130	70-130	70-130	70-130

Analysis Name: TCL SVOAs + Add'l Cmpds

Batch number: 17313WAN026

	Phenol-d6	2-Fluorophenol	2,4,6-Tribromophenol	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
9304794	27	38	74	57	75	79
Blank	26	36	64	52	63	85
LCS	47	58	94	69	87	84
LCSD	46	58	91	72	90	87
Limits:	15-110	15-110	15-110	30-130	30-130	30-130

Analysis Name: TCL SVOAs + Add'l Cmpds

Batch number: 17314SLH026

*- Outside of specification

**-This limit was used in the evaluation of the final result for the blank

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is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC

Group Number: 1872396

Reported: 12/18/2017 11:00

Surrogate Quality Control (continued)

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report. For dual column analyses, the surrogate (at least one surrogate for multi-surrogate tests) must be within the acceptance limits on at least one of the two columns.

Analysis Name: TCL SVOAs + Add'l Cmpds

Batch number: 17314SLH026

	Phenol-d6	2-Fluorophenol	2,4,6-Tribromophenol	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
9304777	93	96	87	86	88	81
Blank	87	92	99	84	86	86
LCS	96	97	96	88	91	89
MS	97	98	97	93	94	91
MSD	99	99	97	91	94	93
Limits:	30-130	30-130	30-130	30-130	30-130	30-130

Analysis Name: TCL SVOAs + Add'l Cmpds

Batch number: 17317SLE026

	Phenol-d6	2-Fluorophenol	2,4,6-Tribromophenol	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
9304778	77	76	73	75	79	73
9304779	58	57	46	55	55	52
9304780	65	65	58	63	65	59
9304782	93	95	97	97	95	94
9304783	99	100	95	97	94	93
9304784	90	91	92	92	88	87
9304785	95	97	98	96	93	94
9304786	75	76	68	73	74	74
9304787	77	76	75	72	77	70
9304788	102	103	104	96	95	95
9304789	101	100	109	95	93	95
9304790	102	102	108	98	95	96
9304791	94	94	100	92	92	91
9304792	94	97	107	96	93	94
Blank	94	96	104	96	99	97
LCS	101	101	97	99	96	95
MS	58	57	46	55	55	52
MSD	65	65	58	63	65	59
Limits:	30-130	30-130	30-130	30-130	30-130	30-130

*- Outside of specification

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Lancaster
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Analysis Request / Environmental Services Chain of Custody

1 of 1

VOASt CFCs

For Eurofins Lancaster Laboratories Use Only

Group No.: 1872396 Sample Nos.: 9304777-94

Acc't: 07032 SF: 285389 SCR No.: 214879

Cooler No.: C27947 37570

Cooler Temperature upon receipt: 42 °C Container No.: 2

Facility Name: Chambers Works		Project Manager: Kathy West				Analyses Required												Comments:		
Facility Contact: Kathy West		Facility Contact Phone No.: 856-540-2056																		
Facility Address: Chemours Chambers Works		Job No.: 77201000-WH06507774																		
Rt 130 & Canal Road		Release No.:																		
Deepwater NJ 08023		PO Number: LBIO-67047																		
Sampler(s): <i>A.Dyroff K.West J.Gomes</i>																				
Project Name: DE RIVER NAPL DELINEATION PHASE III																				
Sample Identification	Date Collected	Time Collected	Matrix	Containers			TCL Volatiles + TICs (8260B)	Freons (8260B)												
				Volume (ml)	Preserv	No.														
D16-BOR-10-(0-0.5)	<u>11-7-17</u>	<u>1345</u>	SW	5	None	5	X	X												
D16-BOR-10-(0.5-1.0)	<u>1</u>	<u>1350</u>	SW	5	None	5	X	X												
D16-BOR-10-(5.0-5.5)	<u>1</u>	<u>1425</u>	SW	5	None	5	X	X												
D16-BOR-10-(6.0-6.5)	<u>1</u>	<u>1430</u>	SW	5	None	5	X	X												
D16-BOR-10-(7.0-7.3)	<u>1</u>	<u>1450</u>	SW	5	None	5	X	X												
D16-BOR-10-(11.0-11.3)	<u>1</u>	<u>1455</u>	SW	5	None	5	X	X												
Turnaround Time Requested (please circle): <input checked="" type="radio"/> Standard RUSH Number of days: <u>8</u>																				
Special Instructions:																				
Bottles Relinquished by: <i>John H. H. Jr.</i>	Date <u>11-7-17</u>	Time <u>1600</u>	Bottles Received by:												Date:	Time:				
Bottles Relinquished by:	Date	Time	Bottles Received by:												Date:	Time:				
Bottles Relinquished by:	Date	Time	Bottles Received by:												Date:	Time:				
Bottles Relinquished by:	Date	Time	Bottles Received by: <i>John H. H. Jr.</i>												Date: <u>11/7/17</u>	Time: <u>1915</u>				

Analysis Request / Environmental Services Chain of Custody

1 of 1

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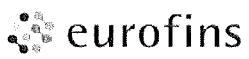
Group No.: 1872396 Sample Nos.: 9304777-94

Acc't: 07032 SF: 285389 SCR No.: 214385

Cooler No.: CS257537592

Cooler Temperature upon receipt: 11 °C Container No.: 3

Facility Name: Chambers Works	Project Manager: Kathy West			Analyses Required						Comments:		
Facility Contact: Kathy West	Facility Contact Phone No.: 856-540-2056									DKQP		
Facility Address: Chemours Chambers Works	Job No.: 77201000-WH06507462											
Rt 130 & Canal Road	Release No.:											
Deepwater NJ 08023	PO Number: LBIO-67047											
Sampler(s): A. Dyroff, J. Gomer, K. west												
Project Name: DE RIVER NAPL DELINEATION PHASE III												
Sample Identification	Date Collected	Time Collected	Matrix	Containers			TCL Semivolatiles (8270C) + TICs	Grain Size (ASTM D422)	TAL Metals (6020/7471A)	Moisture (2540 G)	TOC (SW-846 9060A mod)	Condition upon receipt: <i>Untested</i>
				Volume (ml)	Preserv	No.						
D16-BOR-10-(0-0.5)	11-7-17	1345	SW	125	None	1	X	X	X	X		
D16-BOR-10-(0-0.5)		1345	SW	500	None	1		X				
D16-BOR-10-(0.5-1.0)		1350	SW	125	None	1	X	X	X	X		
D16-BOR-10-(0.5-1.0)		1350	SW	500	None	1		X				
D16-BOR-10-(5.0-5.5)		1425	SW	125	None	1	X			X	X	
D16-BOR-10-(6.0-6.5)		1430	SW	125	None	1	X			X	X	
D16-BOR-10-(7.0-7.5)		1450	SW	125	None	1	X			X	X	
D16-BOR-10-(11.0-11.5)		1455	SW	125	None	1	X			X	X	
Turnaround Time Requested (please circle):	<input checked="" type="radio"/> Standard	RUSH	Number of days: 8			Special Instructions:						
Bottles Relinquished by:	<i>Both Storage Mach D</i>			Date: 10/24/17	Time: 1525	Bottles Received by:					Date:	Time:
Bottles Relinquished by:	<i>M. Gomer</i>			Date: 11-7-17	Time: 1600	Bottles Received by:					Date:	Time:
Bottles Relinquished by:				Date:	Time:	Bottles Received by:					Date:	Time:
Bottles Relinquished by:				Date:	Time:	Bottles Received by:					Date: 11/7/17	Time: 1915



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Analysis Request / Environmental Services Chain of Custody

1 of 1

MS / MSD 4

For Eurofins Lancaster Laboratories Use Only

Group No.: 1872396 Sample Nos.: 4304777-94

Acc't: 07032 SF: 285389 SCR No.: 214379 Cooler No.: C32534 37584
Cooler Temperature upon receipt: 14.5 °C Container No.: 7



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Analysis Request / Environmental Services Chain of Custody

1 of 1

For Eurofins Lancaster Laboratories Use Only

Group No.: 1872394 Sample Nos.: 9304777-94

Acc't: 07032 SF: 285389 SCR No.: 214474 Cooler No.: C2404 37631

Cooler Temperature upon receipt: °C Container No.: 3

Initial Temperature upon Receipt _____ Container No. _____



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Analysis Request / Environmental Services Chain of Custody

1 of 1

VDA+CFG

For Eurofins Lancaster Laboratories Use Only

Group No.: 172396 Sample Nos.

Acct# 07023 SF: 285380 SCR No.:

Acct: 07032 SF: 285389 SCR No.:
S-17

Cooler Temperature upon receipt: _____

Analyses Report

100

Comments:

Facility Name: Chambers Works		Project Manager: Kathy West				Analyses Required										Comments:			
Facility Contact: Kathy West		Facility Contact Phone No.: 856-540-2056																	
Facility Address: Chemours Chambers Works		Job No.: 77201000-WH06507774																	
Rt 130 & Canal Road		Release No.:																	
Deepwater NJ 08023		PO Number: LBIO-67047																	
Sampler(s): <i>A.Dyoff, J.Gomes, S.Morgan, K.West</i>																			
Project Name: DE RIVER NAPL DELINEATION PHASE III																DKQP			
Sample Identification	Date Collected	Time Collected	Matrix	Containers			TCL Volatiles + TICs (8260B)	Freons (8260B)											Condition upon receipt: <i>In tact</i>
				Volume (ml)	Preserv	No.													
D16-BOR-11-(0-0.5)	11-7-17	1215	SW	5	None	5	X	X											
D16-BOR-11-(0.5-1.0)		1220	SW	5	None	5	X	X											
D16-BOR-11-(5.5-6.0)		1245	SW	5	None	5	X	X											
D16-BOR-11-(7.0-7.5)		1250	SW	5	None	5	X	X											
D16-BOR-11-(10.0-10.3)		1310	SW	5	None	5	X	X											
D16-BOR-11-(10.3-10.5)		1315	SW	5	None	5	X	X											
Turnaround Time Requested (please circle): <input checked="" type="radio"/> Standard <input type="radio"/> RUSH Number of days: 8							Special Instructions:												
Bottles Relinquished by: <i>John Palmer</i>	Date 11-7-17	Time 1600	Bottles Received by:													Date:	Time:		
Bottles Relinquished by:	Date	Time	Bottles Received by:													Date:	Time:		
Bottles Relinquished by:	Date	Time	Bottles Received by:													Date:	Time:		
Bottles Relinquished by:	Date	Time	Bottles Received by:													Date:	Time:		

Analysis Request / Environmental Services Chain of Custody

1 of 1

For Eurofins Lancaster Laboratories Use Only

Group No.: 1872396 Sample Nos.: 9304777-94

Acc't: 07032 SF: 285389 SCR No.: 214386

Cooler No.: C28285 37593

Cooler Temperature upon receipt: 11 °C Container No.:

Facility Name: Chambers Works		Project Manager: Kathy West			Analyses Required						Comments:	
Facility Contact: Kathy West		Facility Contact Phone No.: 856-540-2056									DKQP	
Facility Address: Chemours Chambers Works		Job No.: 77201000-WH06507462										
Rt 130 & Canal Road		Release No.:										
Deepwater NJ 08023		PO Number: LBIO-67047										
Sampler(s): <i>A. DyerFF, J. Gomes, S. Morgan</i>												
Project Name: DE RIVER NAPL DELINEATION PHASE III											Condition upon receipt: <i>Intact</i>	
Sample Identification	Date Collected	Time Collected	Matrix	Containers			TCL Semivolatiles (8270C) + TICs	Grain Size (ASTM D422)	TAL Metals (6020/7471A)	Moisture (2540 G)	TOC (SW-846 9060A mod)	
				Volume (ml)	Preserv	No.						
D16-BOR-11-(0-0.5)	11-7-17	1215	SW	125	None	1	X	X	X	X		
D16-BOR-11-(0-0.5)		1215	SW	500	None	1		X				
D16-BOR-11-(0.5-1.0)		1220	SW	125	None	1	X	X	X	X		
D16-BOR-11-(0.5-1.0)		1220	SW	500	None	1		X				
D16-BOR-11-(4.5-6.0)		1245	SW	125	None	1	X			X	X	
D16-BOR-11-(7.0-7.5)		1250	SW	125	None	1	X			X	X	
D16-BOR-11-(10.0-10.3)		1310	SW	125	None	1	X			X	X	
D16-BOR-11-(10.3-10.5)		1315	SW	125	None	1	X			X	X	
Turnaround Time Requested (please circle): Standard <input checked="" type="radio"/> RUSH <input type="radio"/> Number of days: 8				Special Instructions:								
Bottles Relinquished by: <i>Bethel Storage</i>				Date 10/24/17	Time 1529	Bottles Received by:				Date:	Time:	
Bottles Relinquished by: <i>Am. DyerFF</i>				Date 11-7-17	Time 1600	Bottles Received by:				Date:	Time:	
Bottles Relinquished by:				Date	Time	Bottles Received by:				Date:	Time:	
Bottles Relinquished by:				Date	Time	Bottles Received by: <i>Am. DyerFF</i>				Date 11/7/17	Time 1915	

Analysis Request / Environmental Services Chain of Custody

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DuPU
~~MS/11022~~

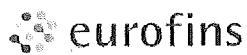
For Eurofins Lancaster Laboratories Use Only

Group No.: 1872396 Sample Nos.: 9304777-94

Acc't: 07032 SF: 285389 SCR No.: 214379

Cooler No.: C32257 37582Cooler Temperature upon receipt: 43 °CContainer No.: 2

Facility Name: Chambers Works	Project Manager: Kathy West			Analyses Required							Comments:			
Facility Contact: Kathy West	Facility Contact Phone No.: 856-540-2056				TCL Volatiles + TICs (8260B)	Freons (8260B)						DKQP		
Facility Address: Chemours Chambers Works	Job No.: 77201000-WH0650774													
Rt 130 & Canal Road	Release No.:													
Deepwater NJ 08023	PO Number: LBIO-67047													
Sampler(s): <i>A-Dyroff, T.Gomes, K.West, S.Morgan</i>														
Project Name: DE RIVER NAPL DELINEATION PHASE III												Condition upon receipt:		
Sample Identification	Date Collected	Time Collected	Matrix	Containers			TCL Volatiles + TICs (8260B)	Freons (8260B)						
				Volume, (ml)	Preserv	No.								
BOR			SW	5	None	5	X	X						MS
BOR			SW	5	None	5	X	X						MSD
D16-BOR- VI - (7.0 - 7.5)-D	11-7-17	12:50	SW	5	None	5	X	X						
Turnaround Time Requested (please circle): <input checked="" type="radio"/> Standard <input type="radio"/> RUSH Number of days: <u>8</u>							Special Instructions:							
Bottles Relinquished by: <i>Am Goss</i>	Date <u>11-7-17</u>	Time <u>1600</u>	Bottles Received by:							Date:	Time:			
Bottles Relinquished by:	Date	Time	Bottles Received by:							Date:	Time:			
Bottles Relinquished by:	Date	Time	Bottles Received by:							Date:	Time:			
Bottles Relinquished by:	Date	Time	Bottles Received by:							Date:	Time:			



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Analysis Request / Environmental Services Chain of Custody

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DUP 4
~~MS/MSD2~~

For Eurofins Lancaster Laboratories Use Only

Group No.: 1872396 Sample Nos.: 9304777-94

Acc't: 07032 SF: 285389 SCR No.: 214474

Cooler No.: C27904 37630

Cooler Temperature upon receipt: 11 °C

Container No.: 1

Facility Name: Chambers Works		Project Manager: Kathy West				Analyses Required						Comments:				
Facility Contact: Kathy West		Facility Contact Phone No.: 856-540-2056										DKQP				
Facility Address: Chemours Chambers Works		Job No.: 77201000-WH06507462														
Rt 130 & Canal Road		Release No.:														
Deepwater NJ 08023		PO Number: LBIO-67047														
Sampler(s): <i>A. Ryff, J. Jones, K. West, S. Mergen</i>		Project Name: DE RIVER NAPL DELINEATION PHASE III											Condition upon receipt: <i>Intact</i>			
Sample Identification		Date Collected	Time Collected	Matrix	Containers			TCL Semivolatiles (8270C) + TICs	TAL Metals (6020/7471A)	Moisture (2540 G)	TOC (SW-846 9060A mod)					
					Volume (ml)	Preserv	No.									
-BOR-				SW	125	None	1	X	X	X	X				MS	
-BOR-				SW	125	None	1	X	X	X	X				MSD	
D16 -BOR- (1 - 70 - 7.5)-D		11-7-17	1250	SW	125	None	1	X	X	X	X					
Turnaround Time Requested (please circle):		Standard	RUSH	Number of days:		8	Special Instructions:									
Bottles Relinquished by: <i>Bottle Storage</i>		Date		Time		Bottles Received by:						Date:	Time:			
Bottles Relinquished by: <i>11/17</i>		11-7-17		1600		Bottles Received by:						Date:	Time:			
Bottles Relinquished by:		Date		Time		Bottles Received by:						Date:	Time:			
Bottles Relinquished by:		Date		Time		Bottles Received by:						<i>11/17</i>	<i>915</i>			

Analysis Request / Environmental Services Chain of Custody

For Eurofins Lancaster Laboratories Use Only

Group No.: 1872396 Sample Nos.: 9304777-9

Acc't: 07032 SF: 285389 SCR No.: 21464

Cooler Temperature upon receipt: 45

Outer Temperature upon Receipt: 41° °C Container No.: 22
Comments:

Client: Chambers Works**Delivery and Receipt Information**

Delivery Method: ELLE Courier Arrival Timestamp: 11/07/2017 19:15
 Number of Packages: 3 Number of Projects: 1
 State/Province of Origin: NJ

Arrival Condition Summary

Shipping Container Sealed:	Yes	Sample IDs on COC match Containers:	Yes
Custody Seal Present:	Yes	Sample Date/Times match COC:	Yes
Custody Seal Intact:	Yes	VOA Vial Headspace ≥ 6mm:	No
Samples Chilled:	Yes	Total Trip Blank Qty:	4
Paperwork Enclosed:	Yes	Trip Blank Type:	HCI
Samples Intact:	Yes	Air Quality Samples Present:	No
Missing Samples:	No		
Extra Samples:	No		
Discrepancy in Container Qty on COC:	No		

Unpacked by Karen Diem (3060) at 20:42 on 11/07/2017

Samples Chilled Details

Thermometer Types: DT = Digital (Temp. Bottle) IR = Infrared (Surface Temp) All Temperatures in °C.

Cooler #	Thermometer ID	Corrected Temp	Therm. Type	Ice Type	Ice Present?	Ice Container	Elevated Temp?
1	DT42-02	1.1	DT	Wet	Y	Loose	N
2	DT42-02	4.8	DT	Wet	Y	Loose	N
3	DT42-02	1.1	DT	Wet	Y	Loose	N

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

BMQL	Below Minimum Quantitation Level	mg	milligram(s)
C	degrees Celsius	mL	milliliter(s)
cfu	colony forming units	MPN	Most Probable Number
CP Units	cobalt-chloroplatinate units	N.D.	non-detect
F	degrees Fahrenheit	ng	nanogram(s)
g	gram(s)	NTU	nephelometric turbidity units
IU	International Units	pg/L	picogram/liter
kg	kilogram(s)	RL	Reporting Limit
L	liter(s)	TNTC	Too Numerous To Count
lb.	pound(s)	µg	microgram(s)
m3	cubic meter(s)	µL	microliter(s)
meq	milliequivalents	umhos/cm	micromhos/cm
<	less than		
>	greater than		
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg) or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.		
ppb	parts per billion		
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.		

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" are not performed within 15 minutes.

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Data Qualifiers

Qualifier	Definition
C	Result confirmed by reanalysis
D1	Indicates for dual column analyses that the result is reported from column 1
D2	Indicates for dual column analyses that the result is reported from column 2
E	Concentration exceeds the calibration range
J (or G, I, X)	Estimated value >= the Method Detection Limit (MDL or DL) and < the Limit of Quantitation (LOQ or RL)
P	Concentration difference between the primary and confirmation column >40%. The lower result is reported.
U	Analyte was not detected at the value indicated
V	Concentration difference between the primary and confirmation column >100%. The reporting limit is raised due to this disparity and evident interference.
W	The dissolved oxygen uptake for the unseeded blank is greater than 0.20 mg/L.
Z	Laboratory Defined - see analysis report

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods.

Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.